

Library  
University of N C  
Chapel Hill N C

April 28 R  
386

Con

SOUTHERN

# TEXTILE BULLETIN

VOL. 32

CHARLOTTE, N. C., THURSDAY, MAY 5, 1927

NUMBER 10



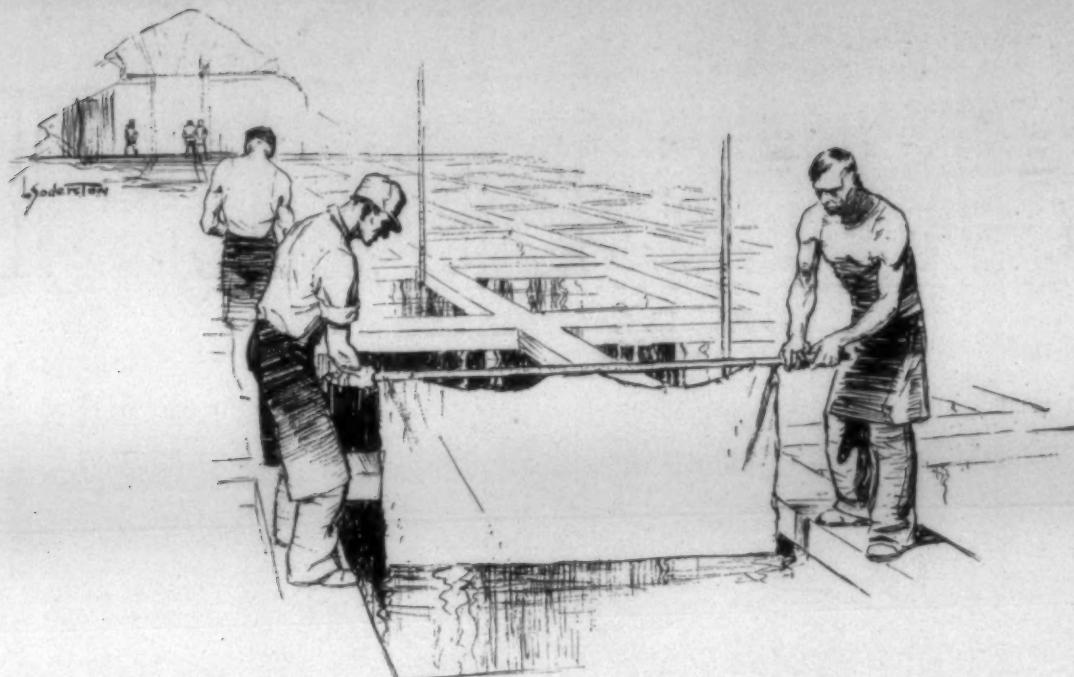
You Buy Northrop Looms  
To Get Results  
You Should Buy  
Draper Bobbins  
Draper Shuttles and  
Draper Loom Repairs  
For the Same Reason  
Let's Talk It Over

**DRAPEL CORPORATION**

Southern Office Atlanta Georgia

Hopedale Massachusetts

Copyright 1917 by Draper Corporation



## From rare--to medium--to well done

**C**OOKING parlance is the correct guide for the proper tanning of belting hides.

You would hardly think of a cattle hide as a delicate substance; yet it is just that. If you expose it to quick changes, to strong tanning solutions for which it has not been prepared by gradual steps, you get a poor piece of leather.

When a Graton & Knight belting hide begins its six month stay in the Graton & Knight tanyard, it goes

first into a milk tanning solution. Gradually and by carefully calculated time intervals, it moves from place to place where contact with stronger and still stronger solutions of tanning gradually brings about that almost miraculous transforma-

tion from sensitive hide to hardy leather. When it reaches the end it has been made into leather that has strength in every pore and fibre because the process is scientifically planned and rigidly controlled.

Every step in the tanning and manufacturing of Graton & Knight belting is subject to exact formula.

That's why Graton & Knight belts last longer.

**GRATON & KNIGHT COMPANY**  
WORCESTER, MASSACHUSETTS  
Branch offices throughout the World

### GRATON & KNIGHT LONG LIFE LEATHERS

Send for Special Information on  
Flat Belt. Round Belt. Straps. Pickers.  
Belt. Fan Belt. Curried Leather.  
Lace Leather. "V" Rub Aprons. Shar-  
Belt Drives. Com- tan Sole Leather.  
ber and Gill Box Aprons. Leather Oak Sole Leather.  
Cups and Crimps. Soles. Counters.  
Welting.

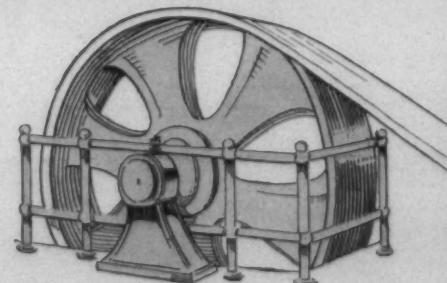
## GRATON & KNIGHT

Standardized

### LEATHER BELTING LASTS LONGER

#### The "STANDARDIZED BELTING MANUAL"

contains 170 pages of useful information about belting, how to use it, take care of it, and make it deliver the most for your money. Send for a copy.



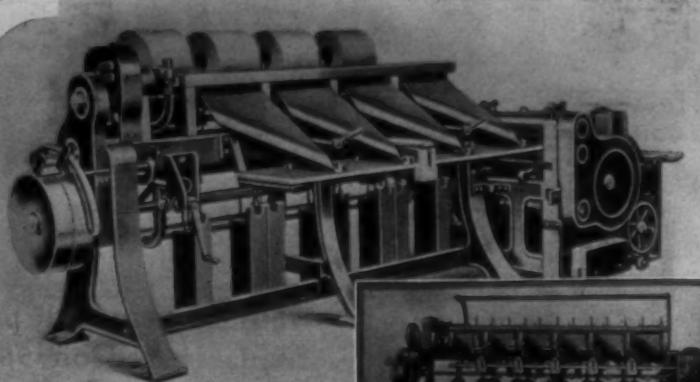
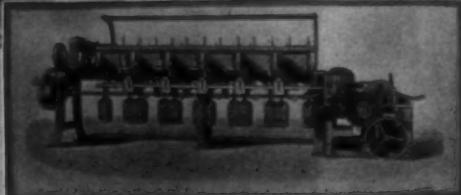
Graton & Knight Company, Dept. 101-Q  
Worcester, Mass.  
Send me a copy of "Standardized Belting Manual."

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Place \_\_\_\_\_  
Prices, quality for quality, 5 to 10%  
lower than the field

**GRATON  
KNIGHT**

# WHITIN MACHINE WORKS

ESTABLISHED 1831

*"Yesterday and Today"*THE RIBBON LAP  
MACHINE

## TEXTILE MACHINERY

**Yesterday** the Ribbon Lap Machine made a lap  $8\frac{3}{4}$ " or  $10\frac{1}{2}$ " in width, had only back and full lap stop motions, no weight relievers, and an unguarded lap head. **Today** the Ribbon Lap Machine makes a lap  $11\frac{3}{4}$ " in width, has back, front, and full lap stop motions, a protected creel for extra laps, metallic or leather covered top rolls, a weight relieving motion, a safety guard for the lap head, a Schenck ratchet lever, and a greatly increased production.

WHITINSVILLE, MASS., U.S.A.

# MATHIESON

Industrial  
Chemicals

## *The Passing of The "Rule of Thumb"*

There was a time when dyers and finishers made up dye baths and bleach liquors with a handful of this ingredient and a scoopful of that. The ingredients, too, were as indefinite as the quantities.

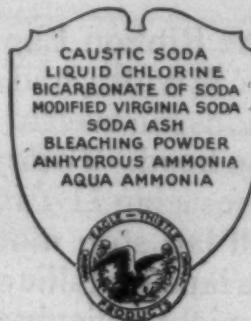
But with the building of new mills, and the formation of new organizations, new methods were introduced into progressive mills. Among the improved practices adopted is the employment of straight alkalies in place of variable alkali mixtures.

The new-day textile mill—the mill that is meeting the modern demand for higher quality at a lower price—has

established standard processing formulas based on 58% Soda Ash and 76% Caustic Soda. Thus, it avoids changes or modifications in formulas sometimes required by the non-uniformity of alkali mixtures.

The use of 58% Soda Ash and 76% Caustic Soda also results in substantial savings in first costs, because the same amount of work can be done with smaller quantities of these standard alkalies.

The location of Mathieson plants and offices is your assurance of prompt service. Specify EAGLE-THISTLE brand when ordering alkalies.

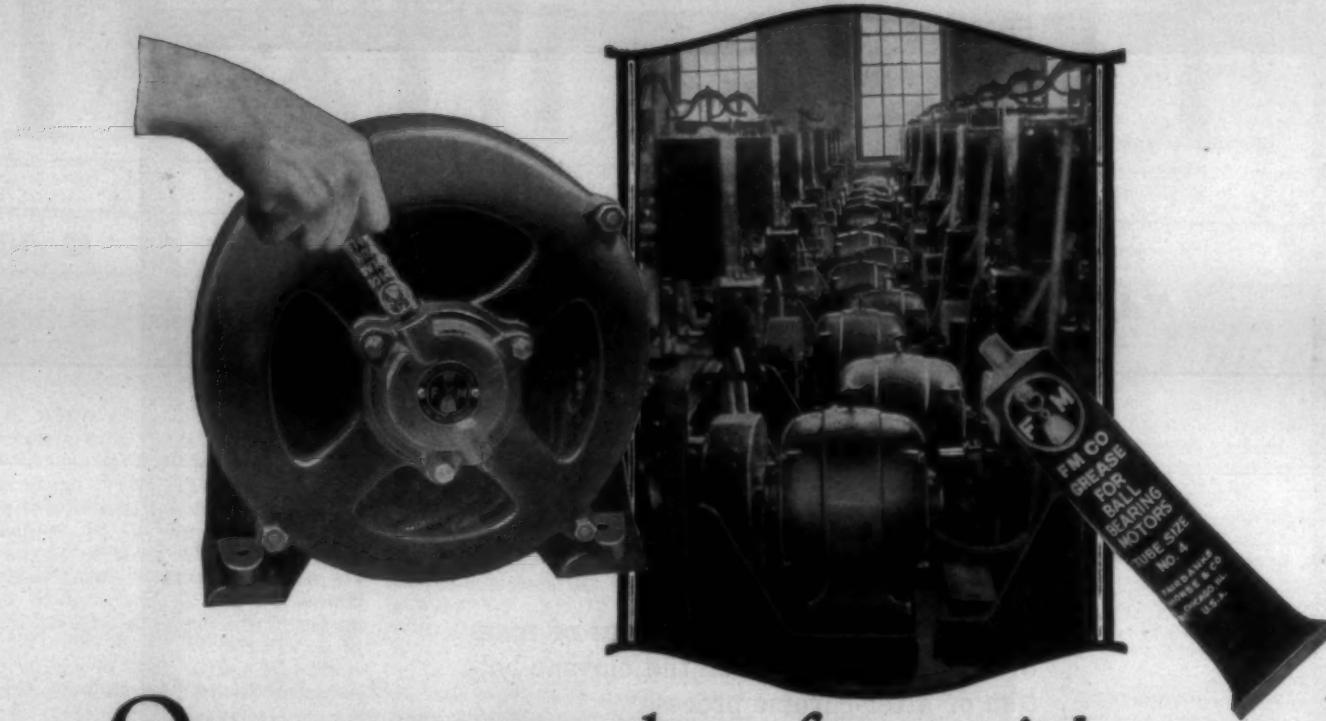


*The* **MATHIESON ALKALI WORKS Inc.**  
250 PARK AVE. NEW YORK CITY

PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE CINCINNATI

Works: Niagara Falls, N. Y.—Saltville, Va.

**Deal Direct with the Manufacturer**



## Once a year—then forget it! Your motor lubrication problem ended

**R**EDUCE motor lubrication to a once-a-year operation. You can do this with F-M ball-bearing motors. One of the greatest advantages to be gained by using F-M *Ball-bearing* Motors is the practical elimination of the all-important motor problem—*lubrication*.

Where F-M *Ball-bearing* Motors go in, the oil can comes out. The man whose sole duty was nursing motor bearings finds a more productive job. Scored shafts and other bearing troubles become things of the past. The cause of most motor failures—insulation breaking down due to oil-soaked windings—is definitely eliminated.

Pioneers in the manufacture of

ball-bearing motors, Fairbanks-Morse again pioneered in further reducing maintenance costs—by the introduction of “measured grease-tube” lubrication.

To re grease the F-M *Ball-bearing* Motor—any type—you have only to select the right size FMCO grease tube and squeeze the prescribed amount of grease into the bearing housing—a matter of a few minutes.

“Measured grease-tube” lubrication is but one of the many important reasons which are leading a steadily increasing number of textile mills to use F-M *Ball-bearing* Motors throughout.

*There is a better F-M Motor for every textile drive. Write for bulletin information.*

**FAIRBANKS, MORSE & CO., Chicago**

Manufacturers of Electrical Machinery, Oil Engines and Pumps  
Textile Mill Branch, 1216 Johnston Building, Charlotte, N. C.

# FAIRBANKS-MORSE

*Pioneer Manufacturers of*

## ball bearing motors

*The right grease—the right size tube. “Measured” lubrication for ball-bearing motors. A Fairbanks-Morse pioneering step that saves motor maintenance costs*

### Fairbanks-Morse Textile Motors

- General-purpose motors
- 
- Motors for opener and picker rooms
- 
- Two- and four-frame motors
- 
- Universal two- and four-frame motors
- 
- Individual drive motors for looms
- 
- Individual drive motors for spinning frames and similar service



AFA70-38

### **NATIONAL ALIZAROL ORANGE 3R**

**A** new Chrome Dye producing an Orange shade of bright reddish tone, characterized by excellent fastness to washing, light, potting, perspiration, and organic acids.

Applicable to wool in all stages of manufacture, and by either the chrome-bottom or after-chrome process.

Samples together with full technical information are available from all National Branches.

**National Aniline & Chemical Company, Inc.**  
40 Rector Street, New York, N.Y.

Boston	Philadelphia	San Francisco
Providence	Chicago	Montreal
Hartford	Charlotte	Toronto

## **NATIONAL DYES**



# SOUTHERN TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 18 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 3, 1897.

VOL. 32

CHARLOTTE, N. C., THURSDAY, MAY 5, 1927

NUMBER 10

## *Health Authority Praises Pacolet Village*

**A**N unusually interesting article concerning health conditions in a Southern mill village recently appeared in "The Nation's Health." The article was written by Dr. R. G. Beachley, of the public health department of the State of Maryland. He was formerly county health officer of Spartanburg county, South Carolina, and his views are based on an intimate study of conditions in the village of the Pacolet Manufacturing Company, which he terms an "ideal cotton mill village."

Dr. Beachley's article, which should prove especially enlightening to Bishop Cannon and associates, is as follows:

"Located in the Piedmont section of South Carolina is one of the most ideal cotton mill villages, from the standpoint of health and beautiful surroundings, to be found in the United States or even in any foreign country. The village is built around the mill and houses the employees of the Pacolet Manufacturing Company.

"Nothing has been left undone for the comfort of the mill employees and their families. The homes furnished the employees are not the ordinary form of shack or small frame house so often seen in the mill villages of the South, but each family occupies a detached bungalow built along most modern lines with attractive architectural designs. In passing through the village one might believe he was in a suburb of a modern American city to judge from the appearance of the streets, homes and surrounding yards. Each home has a front yard which is kept in excellent condition, shrubbery being supplied by an expert gardener who maintains a spacious hothouse and nursery for this purpose. Needless to say, the interior of each home is modern in every respect, as to heating, water, electric lights and sewerage.

### **Welfare Work.**

"Some years ago the mill authorities employed a trained nurse to organize and establish a system of welfare work among the employees and their families. The work has contributed wonderfully to the health of the people, and especially to the low death rate from communicable diseases, as well as the low infant and maternal death rate. In fact, the general death rate is as low as could possibly be expected. In any case of sickness among the

employees or their families, when it is desired, the nurse gives whatever service that might be required and arranges for special medical attention, such as hospitalization and operative treatment.

"One of the most unique developments has been the establishment of a baby day nursery where mothers who are employed in the mill may leave their children during the day. This unusual feature of mill social service work was developed by an additional building being added to the nurses' home, connecting by a large passage. The babies are brought in when the mothers go to work. Every child gets a full bath daily and is cared for scientifically, having plenty of recreation, rest hours and proper amount of nourishment. This day nursery is under the supervision of the day nurse and doctor. A baby clinic is held each week and any child who is brought to this clinic is examined and put on treatment and diet, free of charge. Both the doctor and nurse are present at these clinics.

### **Physical Examination.**

"During the past six months a physical examination clinic has been organized, the object being to give a thorough and complete physical examination to each adult in the village in an effort to further reduce the death rate and protect the health of the employees. The people are very responsive to this new

idea of an annual physical examination and, needless to say, this clinic is a step forward in industrial medicine and is obtaining excellent results.

"In addition to the careful medical and hygienic conditions given the employees, a large community house is provided for recreation, with reading rooms, club rooms, baths, kitchens and dining room. The president of the mill calls this community house the "matrimonial bureau," for in this building the young ladies of the village give their parties and dinners and act as hostesses, under the direction of the club leader, in entertaining their young friends, and the fact that a number of weddings have been solemnized in this attractive building leads one to think that the president may not be entirely wrong in his statement after all.

"A special building is provided for the men, with pool rooms, bowling alleys, gymnasium, picture shows and banquet room with kitchen for their recreation.

"Two fine churches are located in the village, and the community stands on record as one that has complete harmony between the churches, and between the churches and the community.

### **Community Council.**

"A community council is another interesting organization in this village. The council is composed of a

representative from each department in the village and holds a supper meeting once a month when the activities for the month are planned and discussed. This council is responsible for seeing that the plans are carried out. They have one mass meeting each month, one or more general parties for the young people, and discuss all the meetings and all developments from the standpoint of the community.

"A community aid society is composed of a committee made up of two ladies from each street in the village whose duty it is to find and report any case requiring temporary help. If a case is reported by a committee woman, it is then investigated by an investigating committee, and, if advisable, help is given but it is given only through the woman bringing the first report.

"A loan closet is maintained, filled with hospital supplies, electric fans, gowns, sheets and any second hand clothing that may be brought in. These supplies are loaned, or, in the case of clothing donated to the needy family. This has been one of the most valuable organizations in the village, as it helps to maintain a spirit of good fellowship and an interest in each other among the entire community.

### **Classes in Home Hygiene.**

"Classes in first aid and home hygiene are given by the nurse and her assistants. At the completion of these courses regular graduation exercises are held, making it a real social event, which greatly helps to insure perfect attendance.

"A physical director is employed who conducts classes on physical education in the schools.

"The organization of a sunset ball league contributed much to the pleasure of the mill during the summer. Teams from every room in the mill played a short game every afternoon between supper and dusk.

### **Death Rate is Low.**

"A recent health survey of the mortality and morbidity of the Pacolet Mill village shows that there were no deaths during the past year from typhoid fever, diphtheria, scarlet fever, infantile paralysis, malaria, measles, tetanus or cancer. Likewise, there were no deaths of mothers or babies during childbirth, or its complications. The general death rate of the village is much

(Continued on Page 34)



Corner in Nursery, Pacolet Mill Co., Pacolet, S. C.

# The Fine Points of Carding

A Series of Articles Contributed to a Prize Contest on This Subject

## Number One

I will offer the following article on the Fine Points of Carding. It gives the things I have learned through years of experience to be the best for good carding.

Keep every part that revolves well oiled to insure smooth running and prevent wear, loss motion and vibration. Grind cards reasonably heavy at least every 15 working days. You must keep card clothing sharp to do good work. I never was able to keep cards sharp by light grinding. Besides, if the wires are dull, the cards are hard to strip clean and they are often passed up by the stripper. Then before next stripping time, the clothing will be packed full and will pass up neps and foreign matter which the strips should get. When the flats are dull they are hard to keep clean and they become loaded with fine short fibres and dirt next to the foundation and they look bad. A regular burnishing brush will not clean them and it takes a roll covered with stripper fillet which may damage the foundation.

If spiral brushes are worn, it will allow the flats to become dirty and remain so especially if the flats are dull. The flat end cleaning brushes play a prominent part in fine carding. If the brushes are worn not properly adjusted, the end of the flat will become dirty and will possibly keep the flat from resting firmly on the arch as it passes over the cylinder and you will not get the results from the settings that you expect.

The screens must be kept in good condition at all times. One may become damaged by carelessness in taking out fly with some kind of a stick or rake, or a lump of cotton may get in and tear a rib loose. I have found ribs loose without being able to find out the cause. I have my screens examined every time the card is ground and if any damaged screens are found, I take them out and have them repaired. My reason for this is that if a screen is damaged, a rib out or something of the kind the card will not have the proper draft between the screen and the cylinder. It will affect the uniformity of the web and also cause an excessive amount of fly to be dropped. The licker-in screen is very important in the amount and quality of the fly. It should be kept in good condition. If damaged or bent or jammed up, it cannot be set evenly and if it is not set evenly, you cannot get the results you should get.

Broken teeth in the doffer gear affect fine carding. These teeth are often broken by carelessness on the part of the card hand when starting and stopping the doffer, which is done by a shipper lever which connects the producton gear with the doffer gear. When these teeth are broken, they will skip and prevent doffer from running steadily which affects the uniformity of the web.

A card should be kept level to insure smooth running cylinder and doffer and correct settings. If one side or corner becomes low, the cylinder will possibly rub the arch and will also affect some of the important setting points. I have seen grinders, in fact some overseers, when the cylinders were rubbing the arch, take a heavy weight and hit one side of the card next to the floor. This may stop the rubbing temporarily, but it does not level the card.

Another important factor in fine carding is tight clothing. Where clothing is loose, the wire will not stand in the proper position and fails to come in proper contact with the wire on the flats, making good carding impossible, for you cannot use as close a setting as you should have to do fine carding.

It is necessary to keep the licker-in in good condition if you expect good carding. It is very easily damaged by metal of any kind as when a piece of cotton tie gets in the cotton at the opener. If it gets as far as the card, it will surely stop between the feed roll or plate and the licker-in and damage the licker-in wire. These damaged places will not take the cotton from the feed plate regularly and allows it to come through in the sliver in flakes. Licker-ins, when damaged as mentioned above, can be filed with a knife blade file and helped some. The first place I keep watch in the opener room all the time for such things. It is very necessary that card hands not let the laps run out, that they guard against the thick end of a lap running into mote knife, possibly breaking a bracket or knocking the mote knife from the licker-in to remain off and allow motes and foreign matter to pass by with the cotton until the grinder gets to it on his regular round, which may be several days.

Sometimes mote knives get too close to the licker-in and after rubbing against it, they become like fine saw teeth and it is then impossible for them to do their allotted duty. They will let fine motes by which they would catch if they had a good sharp edge. Sometimes this is caused by not having the bracket's tight, permitting the knives, at the least little jar or bump to get against the licker-in. Mote knives can be resharpened on a milling machine which most mills have. If mote knives are bent, it affects carding, for when you set the end of a bent knife to a 7 gauge, it will be way off at the middle. A competent machinist can straighten them very well. Keep mote knives in shape to be set to the same gauge from one end to the other.

### Grinding.

I have said a little about grinding above and I will try to state in a general way, how I have my grinding done to keep the cards in best possible condition. First cut out the feed, strip the card and let it run until

flats are all run clean. Then stop the card, clean out all waste from ends of card and under the card. Remove all belts, put on grinder belt which runs the doffer, start the card in the opposite direction from regular running. Take a hand brush, hold it against the doffer and cylinders. This cleans the dust and dirt from clothing. Then stop the card, place grinder roll on card, adjust them at each end to a 5 or 7 gauge. Then oil well, start the card; then the rolls are easily set to just what you want. Pull them down at each end until the roll strikes reasonably heavy from one end to the other, judging by the sound and the spark when it is evenly set. Doffer need not be set as heavy as the roll on the cylinder, as it does not do much carding and will not get dull so easily. The drum grinder roll that grinds the flats is very important for the flats can easily be ruined by the drum roll through careless setting. The grinder should by all means use a 5 or 7 gauge to set this roll level on the flats before starting, as I believe that it is an impossibility to set this roll level every time by the sound alone. If not level, you will grind light on one end and heavy on the other and after a while the flats will be ground off at the ends and high in the middle. Then you cannot get an even setting and you cannot get fine carding.

About 8 hours is long enough to grind a card unless it is faced or unusually dull.

### Settings.

As all settings will not apply to all cards alike to get the same results, especially those on screens and plates, I find the following settings good and practical under ordinary conditions in the average mill. Set feed plate .012. Closer setting may be the cause of broken fibers; if with wider settings the licker-in may not take the cotton from the feed plate evenly, which would result in cloudy carding or the mote knives would not clean the cotton so well. Set licker-in to cylinder .007; mote knives to licker-in .007; cylinder screen to cylinder .017 at back, .020 at bottom,  $\frac{1}{8}$  inch at front; lip of licker-in screen to licker-in  $\frac{1}{8}$  inch. If you don't want so much fly, set closer. Set flats to cylinder .009; back knife plate .022. If this plate is too close to cylinder it will pack the cotton in the wire and cause the flats to miss some of the short fibers and foreign matter they should get. If too far off, the flats will get too much good cotton out in the stripings. Set front plate .029. This plate controls the amount of strips to some extent. If set too close, you will not get so much strips, if set too far off it will cause cloudy carding. Set stripper comb to flats .029. Many stripper combs are worn out by being set too close and rubbing the flats. The comb will clean the flats at .029 just as well as at .010 and you don't take chances wearing out the comb. Set doffer comb .022. Like the stripper comb, it will do just as well at .022 as at .010.

Piedmont.

## Number Two

To get good carding, it is very important that the card be in good condition. With average staple cotton, 45-pound lap and 55-grain sliver, see that slats are cleaning and brushes are doing their work properly. Be sure that doffer and licker-in belts do not slip and that all parts are running freely. See that the cards are level and oiled.

The following are good average settings: Slats from cylinder .007, in front .009; from middle stand back front plate .017 at top, .022 bottom; down from front slats .012; back plate bottom .022, top .017; down from slats .012; doffer from cylinder .007; comb from doffer with high speed .012; with comb high speed cylinder screen in front .024, back .022; licker-in from cylinder .007; licker-in screen from licker-in .017; mote knives .007; feed plates from licker-in .012.

See that the feed roll holds the cotton. If it does not, the web will be cloudy. The cards should be ground lightly every 15 to 20 days and all wires kept straight. The licker-in must be kept clean. Doffer comb must not be set too high nor too low.

Second Hand.

## Number Three

We all agree that the card is one of the most important machines in the mill. The quality of the finished product depends, to a great extent on the way the cotton is carded. It is here that the fibers are straightened or placed in a parallel position. To keep a card doing good work requires the services of a skilled workman, "the grinder."

After a card has been run for eighteen or twenty days the wire on the doffer, cylinder, and flats become dull. The card must then be ground.

Before a card is put to grinding, the feed must be cut out and the card stripped. All chokes and fly should be removed. The doffer should be backed off to a No. 12 gauge to avoid any danger of rubbing as the speed of the doffer is increased considerably when grinding. The doffer runs in the same direction when grinding as when carding, but the cylinder is reversed. The doffer and cylinder are ground with traverse rolls, with emery fillet made for this purpose. This fillet should be changed every ten or twelve cards.

(Continued on Page 12)



## LONGER LIFE and Greater Beauty at a Fraction of the Purchase Price through FAST COLORS!



THE Government recently made the first practical study of the cost of dyes in textiles, based upon data obtained from 32 concerns, and taken directly from their records by representatives of the Commission. This has been published in the 1925 Census of Dyes.

"The cost of dye," it states, "—is in general a very small fraction of the total cost of a yard of fabric."

".....the increased cost of vat dyes per yard," says the Commission, "—is a minor factor compared with the increased life of the fabric."

An interesting comment, quoted from the Census, on the "world-wide trend toward the use of vat dyes," is the following: "A European colorist, referring to vat dyes, has said that Europe is too poor to afford anything but fast dyes, as he considers the loose or fugitive colors an extravagance."

Have you seen the new Census? It contains much valuable information. (A copy may be secured by forwarding thirty cents to the Superintendent of Documents, Government Printing Office, Washington, D. C.) At the same time have your secretary write us for a copy of a small pamphlet we have prepared on the advantages of fast dyes. Write NOW or tear out this page as a reminder to write as soon as convenient.

### E. I. DU PONT DE NEMOURS & CO., INC.

Dyestuffs Department  
WILMINGTON, DELAWARE

Branch Offices:

Boston, Mass.  
274 Franklin St.

Chicago, Ill.  
1114 Union Trust Bldg.

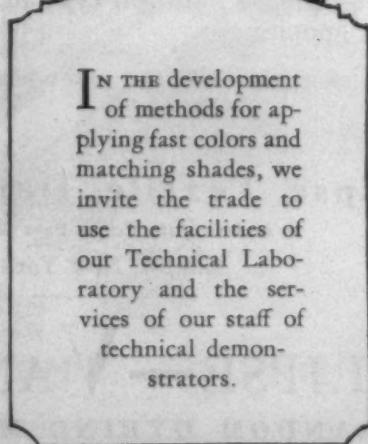
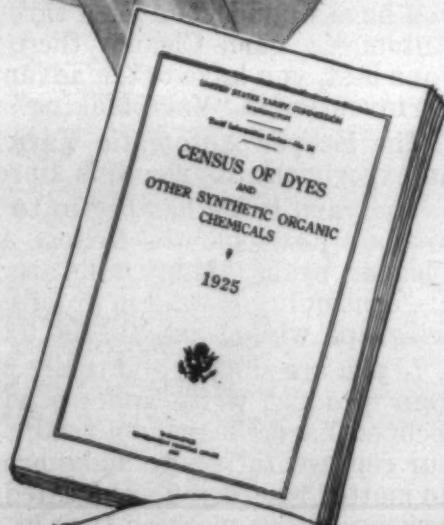
Philadelphia, Pa.  
126 South Front St.

Charlotte, N. C.  
232 W. First St.

New York, N. Y.  
8 Thomas St.

Providence, R. I.  
709 Hospital Trust Bldg.

San Francisco, Cal., 569 Mission St.



IN THE development of methods for applying fast colors and matching shades, we invite the trade to use the facilities of our Technical Laboratory and the services of our staff of technical demonstrators.

## Eastern North Carolina Division to Meet

THE Eastern North Carolina Division of the Southern Textile Association will hold its spring meeting at Roanoke Rapids, N. C., on May 6. Plans for the meeting are in charge of C. M. Black, chairman, and Norman B. Hill, secretary.

The meeting will be devoted to a discussion on carding and spinning and will follow a series of questions compiled by two committees appointed at the last meeting of the group, which was held in Rocky Mount, N. C.

Officers of the division are expecting a large attendance and an unusually interesting and helpful meeting.

In mailing out the questionnaire, Mr. Black and Mr. Hill say:

"While we will not have time to discuss each question owing to the short time we will be in session, still, we are sending this on to you in advance to give you time and opportunity to give each question some thought.

"We will not get up a list of questions for the meeting as heretofore, but will request each member to familiarize himself with these questions so that we may be able to cover as much ground as possible in our meeting.

"May we urge in addition that each member take upon himself the responsibility to bring or interest one or more of his mill friends to attend this meeting, for only through you and your loyal support can we hope to make our meetings a success. We trust you will exert your influence and aid in making this the biggest and best meeting we have had, and lay plans for the future leading to this division becoming the strongest in the association:

### Card Room Questionnaire.

1. How is the best way to run cotton?
  - (a) To mix two lengths of staple together?
  - (b) To run them separately?
2. How is the best way to clean cotton?
  - (a) Slow speed on beater.
  - (b) Fast speed on beater.
3. How close should the feed roller be to the beater?
4. Set the feed plate to the licker-in at what gauge?
5. What is the best method for running off-grades (trashy) cotton? Do you find specks falling out of your yarn in your spinning room? In your weave? If so, how do you get it out?
6. Which pays best to run off-grade cotton or middling cotton?

### Spinners.

1. Method of preparing mix:
  - a. Number of bales used in mix.
  - b. Manner of feeding.
  - c. Use of ageing bins.
2. Reworking returned waste:
  - a. Method used for feeding.
  - b. Safe proportion or per cent.

### Picker Room.

3. How many processes used?
4. What is your beater speed and blows per inch on:
  - a. Breaker.

- b. Intermediate.
- c. Finisher.
- d. Should blade beaters be kept sharp?

5. Settings for breaker, intermediate and finisher:
  - a. Beater to top grid.
  - b. Beater to bottom grid.
  - c. Beater to feed roll.

6. What improvements have been made by the addition of patented devices and to what extent have they helped?

### Cards.

7. Speeds:
  - a. Cylinder.
  - b. Doffer.
  - c. Licker-in.

Discuss possibility of running cylinders 175 R. P. M.

8. Grinding:
  - a. How long.
  - How often.

9. How often should cards be stripped, carding about 125 pounds per day on middling cotton? Method of stripping? Brush? Vacuum?

10. What is the best draft on cards? Best production? What is a reasonable variation in weight on card sliver?

### Drawing Frames.

11. Process of drawing:
  - a. One process.
  - b. Two process.

12. Front roll speed.

13. What is the best method of creeling the drawing frame? Why?

14. How often should rolls be cleaned to give the best running work?

### Slubbers.

15. Draft.

### Intermediates.

16. Draft.

### Speeders.

17. Draft.

### Spinning Room Questionnaire.

1. What effect does long break draft have on spinning breaking, strength, and counts?

2. What one thing in spinning will cause the greatest amount of uneven work?

3. What causes an excessive amount of laps on the middle steel roll?

4. What causes threads to break worse at some particular place on traverse, for instance, what is the trouble when threads break when traverse is at bottom? We think we know, but do we?

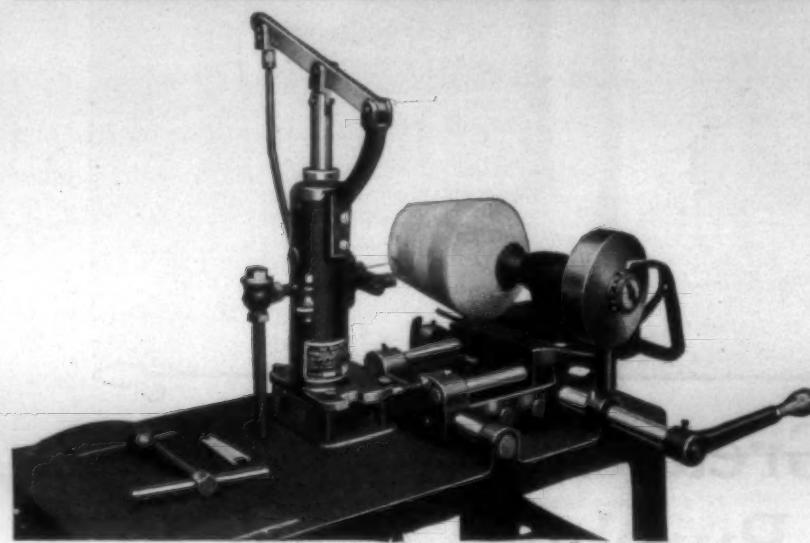
5. What is the cause of weak places one-half inch to two inches long in yarn as it comes from the spinning frame?

6. In your opinion, how long should front steel rolls run on Nos. 7 to 12, Draper speed, without being refluted?

7. Does a filling wind give more uniform twist all through the bobbin than warp wind, and which do we get the best results from, and why?

8. Do you think it best to have extra help to do the cleaning in spinning room, reducing the price per side enough to pay the extra help?

(Continued on Page 35)



## For Your Own Information Here Is Something Worth Reading

Why slow up your cards, or double card, make extra waste and lose production, when you can, by using the Eclipse Automatic Yarn Cleaner attached to your winder or spooler, produce cleaner yarn, free from slubs and weak spots. You will turn out a better product day in and day out with less effort and less worry. When you have wound your yarn through the Eclipse Automatic Yarn Cleaner then you have done your best, you have taken advantage of the latest invention in "Yarn Making" for quality.

The Eclipse Automatic Yarn Cleaner is not an experiment, its worth is a proven fact.

The yarn trade has begun to realize and appreciate just what the Eclipse Automatic Yarn Cleaner means. Many mills are using them and are continuing to send in orders for more (some telegraph while some use the telephone).

If you are sincere and really want to improve your product write and we will send you an Eclipse Yarn Cleaner on trial, also send one of our representatives to make proper installation no matter where you are located. In writing, please mention type of winder or spooler.

We can show you results that even a blind man can see



### Eclipse Textile Devices, Inc.

*Makers of the Eclipse Yarn Cleaner*

Elmira, New York

## ECLIPSE—VAN NESS RANDOM DYEING MACHINE

# THE STABILITY — of the South

ANYTHING like a serious study of the facts will reveal that the industrial development of the South has been marked by stability.

As a section, it sprang into public prominence, not because there had been a spectacular mushroom development, but because the public suddenly became conscious of the South and discovered that many industries had profited from the factors favorable to manufacture.

As a matter of fact, the industrial growth of the South has been going on steadily for more than a quarter century, gathering momentum as the South accumulated and marshalled its resources in raw materials, labor, power, capital and transportation.

So successful have been some Southern enterprises that a glamour has been cast upon industrial migration. It is well to remember this and to make use of the best analytical experience available to co-ordinate all the local factors and variables before selecting a site for a Southern plant.

Proper location with respect to market, raw materials, labor, power and transportation is important, almost vital, to successful factory operation. This and other problems are discussed in "Factories for the Future", a book which will be sent promptly on request.

Airplane view of Chattanooga, Tenn., plant of the Standard-Coosa-Thatcher Co. This and the mills at Piedmont, Ala., together constituting one of the outstanding successful textile mill groups in the South, have grown steadily for 46 years from a small plant in Delaware. All but the oldest building shown here, were designed and built under the supervision of J. E. Sirrine & Co.

## J. E. SIRRINE & COMPANY

General Offices  
Greenville  
South Carolina

### Engineers

Branches:  
Chattanooga, Tenn.  
Birmingham, Ala.



ENGINEERING CONSULTANTS ON THE SOUTH

### The Fine Points of Carding

(Continued from Page 8)

After the rollers have run until you have a good point on the wire (which should be eight or ten hours) they are removed and the card set as follows: Doffer 7, flats 10, licker-in 7, feed plate 12, mole knives 10, screen at back 17, screen at bottom 34, screen in front  $\frac{1}{4}$ -inch; stripper plate 22, doffer comb 12.

The grinder should be a man that thoroughly understands his duties, and one that can be depended on, and should have full authority over the men in his charge.

Cards should be stripped at least three times each day, and cleaned immediately after each stripping. The bearings should be oiled twice each day. Flys should not be allowed to accumulate under the cards but should be removed daily.

Tail end of laps running through cause damage by choking licker-ins or jamming wire on cylinder. The card tender should be instructed about this and never be allowed to let it happen.

Some mill men make a great mistake by trying to put too much through a card. From eighty to one hundred pounds is as much as a card can deliver of well carded cotton in ten hours.

As for drafts, I am in favor of a reasonably long draft. With a draft of 110 to 125 the licker-in takes the cotton from the feed plate smooth or more of a combing effect, whereas with a draft too short it has a tendency to jerk it through in flakes causing neps and cloudy carding.

P. A. W. Ga.

### Number Four

The subject "Fine Points of Carding" is indeed a broad one and only those well versed in the work can bring out all the fine points. While I have spent several years as a card grinder and overseer of carding I am still a long way from being a perfect card man. I will try to give the best I have on the subject, my knowledge having come from hard work and years of experience. I hope it may be of benefit to some one.

After the card is up and perfectly level, the next and most important factor is the clothing. Good clothing should be used and put on right. A good plow-ground wire should be used at all times and when grinding the card, do not grind it to sharpen it but merely to keep it sharp. The correct number of wire for the counts to be spun should be carefully determined and when drawn on, should be tight. I believe the cylinder fillet should have at least 375 pounds pressure and knocked up with a

clothing hammer. If put on by twisting by hand, the selvedge will not come as close together as it should. For coarse work, I think a card should be clothed as follows: cylinder with No. 80s wire, flats with 90s wire and doffer with 90s wire. For medium work, cover the cylinder with No. 100s wire, flats with 110s and doffers with 110s. For fine work, cover the cylinder with No. 120s wire, flats with 130s and doffer with 140s. My reason for saying that the top flats should not be clothed with such heavy wire is because what combing the fibres get is between the cylinder and the flats. Some men may not agree with me on this point, but it is a fact. The combing action on a card takes places between top flats and the cylinder.

Examine the bearings of a new card often for a few days to see that they do not get hot.

As we have only a limited space, I will try to write only of the most important parts of the card. A good plow-ground wire should be used at all times and when grinding the card, do not grind it to sharpen it but merely to keep it sharp. My reason for saying that the top flats should not be clothed with such heavy wire is because what combing the fibres get is between the cylinder and the flats. Some men may not agree with me on this point, but it is a fact. The combing action on a card takes places between top flats and cylinder.

Now as to grinding the card. A good grinder should be in charge and paid well for his work. Grind the flats and cylinders both at the same time, for remember that the top flats should be at all times just as sharp as the cylinder. The length of time a card should be ground, depends upon several things. Some wire is tempered harder than others, some may be bent down and have to be scraped up, which will knock all of the point off of the wire and other factors here show the necessity of a good grinder. He can tell when he has the card sharp, but the general rule is to grind from about 7 a. m. until 4 p. m., about 9 or 10 hours per day. When the emery rolls are set, they should be set so that just a spark can be seen now and then from one side of the cylinder to the other, not too heavy nor too light. About 9 hours of such grinding will put the card in good condition, provided of course that it is not damaged in any way. Otherwise you will have to grind until the card is sharp, sometimes as much as 2 days.

I believe the card is the back bone of good running work. The card cannot be neglected with the expectation that the comb will straighten out the work. I advise anyone to pay strict attention to the card and pickers and then if the work is not going good to look elsewhere for the trouble, but the foundation is laid in the picking and carding. If we keep off the rocks, we must watch these two processes.

Now we have our card sharp after grinding it all day and we come to  
(Continued on Page 32)

## Have You Dobby Looms? —If so you should be weaving RAYON

Let us help you get started. The running of our own weave plants on fancies enables us to offer valuable assistance to mills anxious to participate in the increased profits afforded by Rayon.

*It is not necessary to buy expensive winding machinery. We are prepared to deliver Rayon or Silk in all forms ready for the loom.*

**DUPLAN**  
SILK CORPORATION  
COMMISSION DEPARTMENT

*Southern Office*  
JOHNSTON BLDG., CHARLOTTE, N. C.

*Mills at*  
HAZLETON — DORRANCETON — NANTICOKE, PA.

*New York Office*  
135 MADISON AVE.

# Does Starch Size Eat Up Metal ?

IRON, steel, copper, brass and other like metals are not dissolved by starch, but usually are attacked by mineral acids if present in size solutions. Metal parts of size pumps, size pipes, iron size kettles and slasher size boxes are corroded by these acids when present, even in a diluted state. In any case where the size is acid (sufficient to turn blue litmus test paper to pink), one would be well repaid to take the trouble to neutralize the size by adding the proper amount of a suitable form of alkali.

A better way might possibly be to use ordinary thick boiling pearl starch and liquefy it in the size kettle as it is being cooked. There is hardly anything more simple to do, and there would never be any need to worry about mineral acids being present in the size, since this starch is *natural* starch just as made by *nature*, and is the basis from which all "modified" acid converted thin boiling starches are made.

Ordinary thick boiling pearl starch has wonderful properties for warp sizing when liquefied by ARCY. Results are uniform, for it is *natural* starch with nothing having been done to it to alter its properties. It is one starch sold by practically all starch manufacturers with approximately the same fluidity, its fluidity having been standardized by *nature*. When liquefied in

the size kettle by ARCY, there is produced a slow congealing thin liquid, possessing marked penetrative and binding properties. Hence the usually noted reduction in "shedding" under the loom, with reduced amount of weave room floor seeps. The smooth feel, imparted to the sized warp, is due to each separate granule of the starch being thoroughly liquefied, to form a film coating on the surface of the yarn, which binds down the loose fibre ends.

Try ARCY liquefied pearl starch and forget all about fluidity variations, for there is nothing at all difficult about liquefying pearl starch in your own cooking kettles as the starch is being cooked. Just dump a small amount of ARCY into the kettle with the starch, and by the time the starch solution comes to boil the starch will be completely liquefied. Positively no costly "extra" equipment is necessary. Best results are obtained by bringing the starch solution up to boil in about 30 minutes, requiring nothing more than a small by-pass valve being cut into steam supply line, around the regular steam valve. It costs no more to use ARCY liquefied pearl starch and chances are you will like results, better. ARCY is in dry powdered form, consists largely of starch, and depends for its activity on enzymes, which do not convert starch into the sugars in the size kettle.

*Manufactured by*

**AMERICAN RAPIDASE COMPANY, Inc.**

*Distributed through*

# DRAKE CORPORATION

NORFOLK,

::

VIRGINIA



## "Lug Straps That Last"

BONDARON Lug Straps outwear ordinary lug straps many times because of their great tensile strength. In addition to their long wearing quality BONDARON Lug Straps are soft and pliable. This pliability and softness when used to pull the **picker stick** has a cushioning effect which acts as a shock absorber for the blow.

BONDARON Lug Straps perform so well because they are manufactured by a secret process which tans leather to make it pliable yet strong and durable.

In leather it always pays to buy the best. Insist upon genuine BONDARON Lug Straps and cut down your leather loom expense.

Send for Booklet No. 101

Manufactured Exclusively By

CHARLES  
**Bond**  
 COMPANY

Leather Curriers, Importers and Belting Manufacturers

617 Arch Street

Philadelphia, Pa.

## Testing Textile Fabrics

WITH the exception of cotton, all fabrics were very frequently adulterated in order to cheapen the price, he said. It was undeniable that most people when buying textile fabrics wanted to be sure that the material was actually as stated. All fibres had a distinctive characteristic when seen under the microscope, and could be fairly easily distinguished by their frequent appearance. It was not, however, always possible to use this test, in which case chemical tests had to be made, according to an address delivered by H. P. Curtis before the members of the Manchester Atheneum Textile Society.

Cotton immersed in strong hydrochloric acid was completely decomposed, the dried sample forming a powder. A hot strong solution of nitric acid had a similar effect on cotton, while weak sulphuric acid stained the material blue. To decide between American and Egyptian cotton was sometimes difficult. The best way was to clear the material of finish and size, untwist the thread, and if the fibres had a staple length of over one inch it could be assumed that they were of Egyptian cotton.

As a test for mercerized cotton the sample was put into a strong cold solution of zinc chloride in distilled water with a few crystals of iodine added. The cloth would be colored blue, and if the color remained after washing, the cotton was mercerized. All traces of starch had to be removed from the sample under test as this material also gave the blue shade.

With regard to silk, this material would dissolve in hot caustic soda or caustic potash, with the exception of Tussah silk. Hydrochloric, nitric, and sulphuric acids were also solvents of silk. The first two named acids could also be used in testing for wool. Hydrochloric acid turned the material yellow. When boiled in a 5 per cent solution of caustic soda wool was entirely dissolved. If a few drops of acetate of lead were added, a black precipitate would fall, showing wool in a mixture fabric. The wool was completely dissolved, and any remaining fibre would be cotton or some other vegetable fibre.

It was to be noted that wool contained sulphur, so that a test for sulphur would indicate whether wool was present or not. A solution of plumite of soda, made by dissolving oxide of lead in caustic soda would turn wool black through chemical action on the sulphur. Other fibres, if of a vegetable nature, would remain unchanged.

Many fabrics contained a certain percentage of wool in the weft, and it was often necessary to ascertain the actual amount. To do this, the sample was immersed in a strong solution of hydrochloric acid, then dried, after which the cotton present would have been removed. The sample should have previously been accurately weighed, then after the acid treatment the sample is washed and boiled in water, dried in a moderate heat, and left for the natural moisture to be regained. The residue should be weighed and the difference in weight would show the

percentage of cotton dissolved. Another method was to dissolve the wool out by the caustic soda solution method, this test then giving the percentage of wool lost.

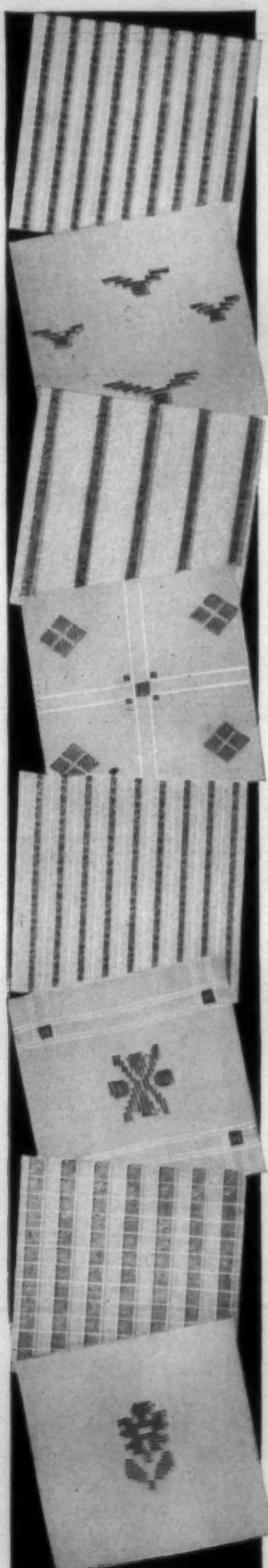
For testing linen and cotton in cloth, the fabric had to be soaked in a hot solution of methylene blue, then rinsed in cold water. The rinsing removed the color from the cotton, while the flax remained blue. This test, however, was not suitable for bleached fabrics. A simpler test where practicable, was to draw fibres from the cloth. The flax fibres would be much longer and more parallel than the cotton. By smearing a little olive or rape-seed oil across a fabric composed of linen and cotton, the flax became transparent when seen through a glass, while the cotton remained opaque.

In order to estimate the percentage of cotton, silk, and wool in a fabric, the sample was boiled for five minutes in hydrochloric acid, when the silk would be dissolved out. After drying and weighing, the percentage of silk could be ascertained. At this stage the method already explained could be carried out to give the percentage of wool present, the residue being the amount of cotton.

It was sometimes required to ascertain the actual amount of cotton present in a finished fabric. To do this the sample was first carefully weighed, then heated at 110 degrees centigrade until it ceased to lose weight, the difference showing the amount of moisture present. The fabric was then soaked in pure water, and after frequent squeezing between the fingers, was gradually heated to boiling point, this process removing all matter soluble in water. The sample was subjected to hot water, to which 2 per cent of hydrochloric acid had been added. After washing and drying most of the sizing materials would be removed. Fatty matter was removed by washing the sample in a 5 per cent solution of caustic soda for a few minutes, after which washing in a soap solution and then in a solution of ammonium carbonate, followed by a rinsing in pure water, would yield a sample which being dried thoroughly was composed of nothing but pure cotton.

For artificial silks one of the simplest tests was to heat the fabric for 10 minutes at about 200 degrees centigrade, when it would be found that artificial silk was destroyed, and would crumble away on rubbing, whereas there was no action on cotton, wool, or silk. Artificial silk burned easily with no smouldering, while real silk smouldered, and gave off a smell of burnt hair. When wet, real silk remained strong, but artificial silk became weak, and could be easily fractured. If subjected to a hot solution of caustic potash real silk dissolves quickly, but artificial silk dissolved very slowly. For determining the various kinds of artificial silk a color test could be employed. The sample was immersed in a solution of equal parts of hydrochloric acid and iodine. Viscose would turn a dark blue, acetate yellow, nitro-cellulose violet.

# COLOR



## THE MASTER SALESMAN

THE days of dull, drab bedrooms are passé. Modern women demand bright, cheerful colorings that make this room as attractive as the living room.

Multicolored curtains and overdrapes for windows are recent developments, but already the sales of these fabrics are far ahead of the white and plain colors. Women want pink rooms, blue rooms, children's rooms, and each new demand means increased sales.

Likewise in shirtings, the modern trend is toward a wider use and range of colors.

Among the leading fabrics that cater to the demand for COLOR are "Novelite" Draperies, "Pickwick" Draperies, and "Ebard" Shirtings. COLOR is the dominant feature of these products. This makes it a vital necessity that the component yarns be colored by an organization having facilities for dyeing and delivering yarn in a wide range of colors on short notice.

One of the reasons for

the popularity of Franklin Process colors is that the very nature of the process permits consistently better deliveries than when the yarn is colored by other methods.

Quick delivery of dyed yarn to the mill is of vital importance to the merchandiser in meeting the demands of an ever-changing market for new and timely designs.

We offer you the same advantages that have contributed to the success of "Novelite," "Pickwick," and "Ebard" products — prompt deliveries, efficient laboratory service for matching shades, thorough penetration of every fibre of the yarn, and the Franklin Package which permits maximum economy in handling the yarn.

With these services, is it not possible that you, too, will find more profits through the increased use of COLOR?

Put your problem up to us and let us give you our opinion.

It costs nothing to find out.

Write us to-day.



A Franklin Package  
of Dyed Yarn.

It will deliver  
freely by rotation  
or over end.

### FRANKLIN PROCESS COMPANY

Largest Job Dyers of Yarn in America  
also Yarn Spinners, Manufacturers Glazed Yarns, Dyeing Machines

PLANTS PROVIDENCE DENTON, ENG.

PHILADELPHIA New York Office, 66 Leonard St.

SOUTHERN FRANKLIN PROCESS CO., Greenville, S. C.

CENTRAL FRANKLIN PROCESS CO., Chattanooga, Tenn.



## FRANKLIN PROCESS

Commission Dyeing of Yarn in the Wound Form

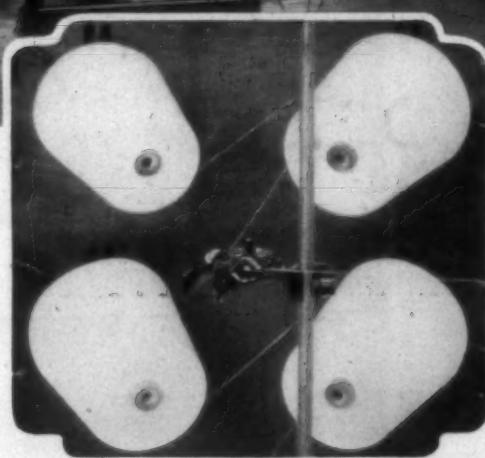
Highly Mercerized, Clipped, Dotted, French Marquises, merchandised by Pickwick Draperies, Inc.

"Ebard" Shirtings converted by E. O. Barnard Co., Inc., New York City.

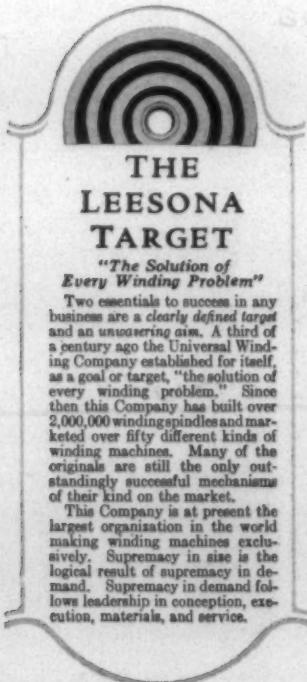
"Novelite" Draperies converted by A. W. Baylis Co., New York City.

Ad. No. 226. Printed in U. S. A.

## LEESONA UNIVERSAL HIGH-SPEED WARPING



Showing magazine feature of creel, by which continuous warping and a speed of 250 to 300 yards per minute are obtained, as against 50 to 60 yards per minute by slow-speed warping.



THE  
LEESON  
TARGET

*"The Solution of  
Every Winding Problem"*

Two essentials to success in any business are a *clearly defined target* and an *unswerving aim*. A third of a century ago the Universal Winding Company established for itself, as a goal or target, "the solution of every winding problem." Since then this Company has built over 2,000,000 windings spindles and marketed over fifty different kinds of winding machines. Many of the originals are still the only outstandingly successful mechanisms of their kind on the market.

of their kind on the market. This Company is at present the largest organization in the world making winding machines exclusively. Supremacy in size is the logical result of supremacy in demand. Supremacy in demand follows leadership in conception, execution, materials, and service.

# 1/2 to 2/3 REDUCTION IN LABOR COST

This highly important saving is effected by the Leesona Universal High Speed Warping system. 1350 spooler spindles and 17 slow-speed warping units have been replaced in this mill by only 672 high-speed, cone winder spindles and four high-speed warping units.

The labor cost of warping and creeling has been reduced one-half to two-thirds; a great saving in floor space has been effected; there has been a marked improvement in the quality of the warps.

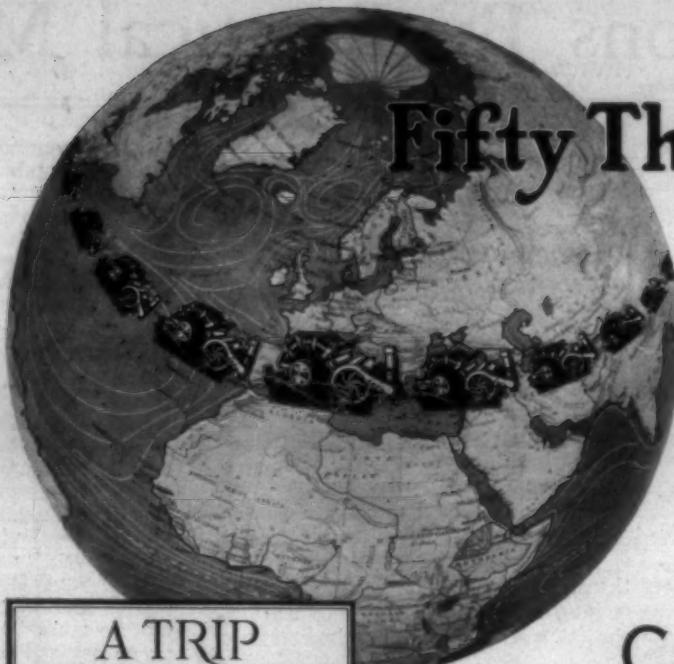
Warping is continuous except when removing a full beam or when an end breaks, due to the magazine cone supply feature of the creel. Dead yarn is entirely eliminated. Exceptionally uniform warps are produced since each end is tensionized uniformly in the creel. The original elasticity of the yarn is retained, as there is no inertia to overcome, as when warping from rotating supplies.

Further details regarding this system, including the No. 60 GF machine which prepares the cones, will be furnished on request.

UNIVERSAL WINDING COMPANY  
PROVIDENCE BOSTON PHILADELPHIA  
CHICAGO, UTICA NEW YORK MONTREAL AND HAMILTON, CANADA ATLANTA  
CHARLOTTE

**SEESONA**  
REG. U.S.A. AND OTHER PRINCIPAL COUNTRIES

# UNIVERSAL WINDING



# Fifty Thousand Cards!

A TRIP  
AROUND the WORLD  
with Saco-Lowell Cards  
would take one to—

Canada	France
Mexico	Germany
Columbia	Spain
Chili	Italy
Argentine	Poland
Ecuador	Sweden
Venezuela	China
Brazil	Japan
Peru	

On April 26th We Shipped

## CARD No. 50,000

to the Bibb Manufacturing Co., Macon, Ga.

JUST forty years ago the Saco-Lowell Shops (then the Pettee Machine Works) made the FIRST Revolving Flat Card built in America; and shipped it to the Jackson Company of Nashua, N. H.

Since that time we have built FIFTY THOUSAND Cards and shipped them all over the world.

We are proud of this record, and believe that it shows better than any other testimonial, that the Saco-Lowell Card is

**THE STANDARD OF COMPARISON**

# SACO - LOWELL

LARGEST MANUFACTURERS OF TEXTILE MACHINERY IN AMERICA

147 MILK STREET, BOSTON, MASSACHUSETTS

CHARLOTTE, NORTH CAROLINA

GREENVILLE, SOUTH CAROLINA

ATLANTA, GEORGIA

# Practical Discussions By Practical Men

## Contest Begins

We begin publication, on Page 8 in this issue, of the first of the articles submitted in the contest "The Fine Points of Carding."

A number of the articles will be published each week until all have appeared.

We are receiving additional contest articles every day and we expect this contest to be one of the most interesting and successful we have ever conducted.

All men who are planning to enter the contest are urged to get their papers in as early as possible. All articles must be mailed not later than May 15th.

We are very much gratified that so many men have entered the contest and take this opportunity of thanking the men who have already contributed articles to help make it a success. The idea of the contest is to get the practical ideas of men who know how to operate cards and the information that is contained in the articles will prove of great practical benefit to every one interested in carding.

There is still time to send in an article for the contest and we hope that many more men will do so before the closing date.

The rules governing the contest are given in full on this page.

### Is the Twist Affected?

Editor:

When changing from warp wind to filling wind, what affect does it have on the twist when pulling off the yarn from over the top at the spoolers? Does it tend to add more or to take out the twist of the yarn?

Dixie.

### Thread Guides on Twisters

In ordering thread guides for twisters, what kind should be ordered? Should they be just like the thread guides used on spinning frames?

Twine Mill.

### Lint Trouble on Twisters.

Editor:

I am troubled with lint in our twisting room, when one end breaks, the loose end on the bobbin whips around and throws out lint which in turn is caught by the ends on each side of the broken end. This makes it imperative to break down the two ends affected with the lint for the purpose of removing this defect. This entails a great deal of extra work. Can this be overcome and how?

Griffin.

### Questioners for Carders.

Editor:

I wish to submit the following questions through your valuable paper:

(1) Is there any practical way to

### CONTEST RULES

The contest for the best article on "The Fine Points of Carding" will be governed by the following rules:

1. Articles must not be longer than three full columns.
2. Articles must be signed with assumed names but the real name and address of the writer must be known to us.
3. The subject, The Fine Points of Carding, will include anything that has a bearing upon the operation of cotton cards.
4. Articles must be original and articles that include paragraphs or sections copied from other articles on this subject will be thrown out. The contestants and all of our readers will be requested to call our attention to any articles that show evidence of having been copied.
5. Articles will be published by us in the order received and judges will be instructed that where two are of equal merit the decision shall be given to the one received first. It is therefore advisable to mail articles as early as possible.
6. In mentioning machinery the name of the maker can not be given except when necessary to give such information as special card settings, etc. This rule will not apply to special machinery or attachments that have no competitors.
7. Articles which are received after May 15, 1927, will not be considered in the contest.
8. The contest will be decided by seven practical men who, acting independently of each other, will read the articles and give us their opinion relative to which is the best and second best. A vote for first place will count one (1) and a vote for second place will count one-half ( $\frac{1}{2}$ ).
9. The article receiving the largest number of the judges' votes will be declared the winner and its writer will receive \$25.00. The writer of the article which receives the second largest vote will receive \$15.00, and of the third best, \$10.00.

The writer of the best practical article contributed to this contest will receive \$25.

The second prize will be \$15 and the third prize \$10.

ground drawing cards or pickers, to kill the undesirable effect of electricity? Is so what?

(2) Does oiling by spray in the hopper, colored or bleached cotton, kill the effects of electricity in the machines following? Does it pay?

(3) Should it be a paying investment to install humidifiers over drawings, cards or pickers, in a colored mill using 34,000 pounds of cotton per week, most of it dyed or bleached, for making ginghams.

Color.

### Answer to Questioner.

Editor:

Questioner asks what hank is his drawing-in frame sliver which weighs 56 grains and what is the rule to find out the hank. The answer is that a drawing sliver weighing 56 grains per yard when reduced to hank number would be 15-100 hank nearly. The rule for reducing slivers to hanks is the same rule which is applied to yarns and rovings, viz: as follows:

Multiply the yards by 8 1-3 and divide by the weight in grains, thus: One yard of drawing or card sliver weighs 56 grains—what is the hank  $1 \times 8 \frac{1}{3} = 8 \quad 33-100 \div 56 = 15-100$  hank.

Expert.

### Answer to Carder.

Editor:

Referring to Carder's question as to what is the best way to clean sledged cotton better, when he can-

yarn will vary in diameter. We will take the number 60s yarn which is to go into a fine voile dress material. This yarn must be hard twisted. Sometimes these yarns will be twisted as much as 9 times the square root of the yarn. Now it stands to reason that a yarn twisted as hard as this, and sizing just 60s that it will have a smaller diameter than the same size of yarn which is made to weave a piece of sateens with only standard twist in the yarn. Again—combed 50s yarn would have a smaller diameter than a carded yarn of the same number. This is because the yarn is made of clean long fibres and will lay closer together even though less twisted than carded yarns made of shorter and dirtier cotton. The carded stock will be more hairy or fuzzy. Gassed yarns as well as wet twisted yarns will have less diameter than the same size yarn not gassed nor wet twisted. When carded yarns have different standards of twist, the diameters will be different.

Thus: warp 30s will be harder twisted than hosiery 30s yarn and which will be soft twisted. The warp will be more compacted than the hosiery and have a smaller diameter. Still another reason when 30s yarn is made with along draft it will be of more diameter than when made with a shorter draft. The whole matter of yarn diameter or bulk of cross section is related to the amount of twist, process and density that the yarns receive.

Conn.

### Answer to Questioner.

Editor:

Questioner wishes to know a rule to reduce drawing to hank number. I can not see any necessity for doing this but it can be done. We speak of drawing as certain grain drawing, meaning that one yard weighs a certain number of grains. Suppose one yard of drawing weighs 60 grains. We speak of it as 60 grain drawing.

After the drawing is made into roving, we speak of it as certain hank roving.

To find the hank roving number divide the weight of twelve yards into one hundred. If twelve yards of roving weighs twenty grains we know it is five hank roving, because 100 divided by 20 equals 5. The same rule will apply to drawing.

P. A. W.—Ga.

### Half Million Idle Spindles in Fall River.

Fall River, Mass.—With the closing of the American Linen Company plant for an indefinite period, the total of idle spindles in this center may reach over the half million mark. Loom idleness is estimated at higher than 42,000, with the prospects of the latter increasing rather than diminishing because of the tendency toward further curtailment.

It is true that there are yarns of various diameter and yet they will size alike for numbering. This is all right when this matter is under control and brought about for a specific purpose, but it is very undesirable when the yarn diameters vary in any one lot when even work is desired in a line of finished product, or in other words, is not under control.

Here is one reason why a given

# 95,000,000

BEAR BRAND HOSIERY CO.		OFFICE OF THE PURCHASE	
GENERAL OFFICES-HOTEL BUILDING BOSTON AND BOSTON BOSTON			
To The Kaumagraph Co., 350 W. 31st St., New York, N. Y.		NUMBER 5290	
TERMS Net 30 days		STOCK NUMBER	
F. O. B. Point of shipment		CUSTOMER'S NO.	
Delivery to be made as ordered out		CHARGE TO	
QUANTITY	25,000,000	PRINT NAME IN FULL OF ALL NEW ACCOUNTS	
Dry Transfers		DATE	
BEGAN		SALESMAN	
GOTHAM SILK HOSIERY CO., INC.		PRINT NAME IN FULL OF ALL NEW ACCOUNTS	
MANUFACTURERS		ROUTE	
Executive Offices—350 FIFTH AVENUE, N. Y.		Best Way	
Kaumagraph Co.		SHIPPING DATE	
350 W. 31st St.		12/1	
CITY		DESCRIPTION OF DESIGN	
PLEASE FURNISH US WITH THE FOLLOWING:		Assorted various designs	
Quan.		MATERIAL	
25,000,000		COLOR	
by our mills		ROLLS	
Transfers - Colors, designs and co		SAMPLES	
NUMBER		TERMS NET, 30 DAYS	
STOCK ORDER		No Discount for	
DATE		Prepayment	
CHARGE TO		Kefus H. Scott	
Marshall Field Wholesale		New York, N. Y.	
Chicago, Ill.		As ordered	
SHIP TO		12/1	
ROUTE		usual	
CUSTOMER'S NO.		Ordered	
DESCRIPTION		As per drawing	
ROLLS		12/1	
COPY		12/1	
DIE		12/1	
QUANTITY		10,000,000	
FORMULA		25,000,000	
SAMPLE		As per drawing	
TERM		As per drawing	
IN ACCEPTING THIS ORDER FOR DEFERRED SHIPPING IT IS EXPRESSLY UNDERSTOOD THAT SHIPPING INSTRUCTIONS FOR ENTIRE BAL			

# KAUMAGRAPHS

## Carded Yarn Spinners Form Institute Group

THE necessary action to form a Carded Yarn Spinners Group of the Cotton-Textile Institute was taken at a meeting held at the Chamber of Commerce in Charlotte on Wednesday, when Walker D. Hines, president of the Institute, met with representatives of the carded yarn industry. The meeting was entirely executive.

Mr. Hines, president of the Cotton-Textile Institute, gave out the following statement at the conclusion of the meeting:

"The meeting that we had this morning was the outgrowth of the discussion which took place when I was in Charlotte two months ago and has as its object the formation of a carded yarn group within the Institute.

"The sentiment of the meeting was unanimous that the group should be formed and necessary action to that end was taken.

"On account of the fact that there are a number of Northern mills also engaged in the production of carded yarns, it will be necessary to have a similar meeting in New York at an early date and it is anticipated that immediately after the New York meeting of the Northern mills, the group organization will be completed.

"It was the view of the meeting at Charlotte today that it would be a convenience to divide the group into three (3) sections, consisting of (a) soft yarns, (b) hard single and ply yarns including 18s and coarser, (c) hard single and ply yarns including 20s and finer.

"Under the policy of the Institute, it is necessary to have a group committee appointed by the president, but as explained it is my policy to make appointments in accordance

with recommendations of group meeting. The group accordingly recommended and I appointed the following members for the three sections of the group, as follows:

"Section A—Clifford J. Swift, Columbus, Ga.; Sidney D. Cooper, Henderson, N. C.; R. C. Moore, Charlotte.

"Section B—A. M. Fairley, Laurinburg, N. C.; C. A. Ensign, Forthye, Ga.; H. T. Crigler, Pelham, S. C.

"Section C—J. A. Mandeville, Carrollton, Ga.; M. L. Cannon, Charlotte; J. A. Long, Roxboro, N. C.

"At the New York meeting there will be additions to these committees and out of the full membership of these committees six members will be selected for the advisory committee for the group as a whole.

"I announced that in accordance with the power invested in me, B. B. Gossett would be chairman of the advisory committee, thus giving that committee a total membership of seven. Mr. Gossett is a member of the executive committee of the Institute representing the Carded Yarn Spinners.

"It is anticipated that as soon as that committee can be completely organized after the New York meeting, it will begin functioning actively and to deal with the various problems that confront the Carded Yarn Spinners, handling them along the lines consistent with the policy of the Institute.

These matters will include adequate statistics and prosecution of careful inquiry into the cost of production. Matters relating to the methods of selling will also have consideration.

"The meeting showed a great deal of interest in the subject and gave emphatic assurance of supporting the organization thus formed."

### Master Mechanics' Meeting

There will be a joint meeting of the Master Mechanics Section of the Southern Textile Association and the Greenville Branch of the Carolinas Section of the American Society of Mechanical Engineers, Wednesday, May 18, 10:00 a. m., Poinsett Hotel, Greenville, S. C.

The program is as follows:

1. Some Cotton Mill Machine Shop Methods. By: G. T. King, Supt., Power, The Lancaster Cotton Mills, Lancaster, S. C.

2. Why Should Electric Power Consumption appear to Vary Over Stated Periods During which Production Hours are the Same? By: George Wrigley, Electrical Engineer, J. E. Sirrine & Co., Greenville, S. C.

3. Care and Maintenance of Steam Power Plants. By: David J. Kerr, Supt., Power, Champion Fibre Company, Canton, N. C.

Luncheon 1:15 p. m., Poinsett Hotel.

H. H. Iler, plant engineer and master mechanic, the Newberry Cot-

ton Mills, Newberry, S. C., is chairman of the Master Mechanics Section and will preside at the meeting.

There will be a discussion on all of the above questions, and it is hoped that every master mechanic who can possibly do so will attend this meeting, and that every mill will insist upon the master mechanic going.

These questions are of vital interest to every master mechanic and mill so make it profitable and beneficial to both by attending the meeting.

### Accidents in Cotton Mills

The operation of cotton manufacturing machinery causes comparatively few accidents. Most of the lost time accidents in cotton mills are due to non-mechanical causes or to the operation of repair and maintenance machinery.

The Textile Code Committee of the National Safety Council has been working on a safety code for cotton mills for some time and are about

ready to submit a suggested safety code for cotton mills.

In studying the causes and remedies for accidents the American Mutual Liability Insurance Company has compiled the facts shown in the accompanying table from their accident record experience. These figures are an average for the last five years and show a total loss of 66,323 days from 532 accidents per year due to accidents of all kinds in mills insured by them. Of this total 19,041 days were lost each year due to 152,85 accidents from the operation of textile machinery alone. As time lost includes Sundays and holidays the actual loss in working days is probably considerably less.

#### Mechanical Causes.

	Per cent
Warping and weaving machines	10.32
Spinning, spooling and twisting machines	7.38
Card	4.12
Opening and picking machines	2.92
Elevators and hoists	2.06
Combers, slubbers and lapping machines	1.48
Cloth room machines	1.30
Incidental woodworking machines	.75
Power and transmission	.69
Incidental machine shop tools	.68
Other textile machines	1.19
Other machines	1.16
<b>Total mechanical causes . . .</b>	<b>34.05</b>

#### Non-mechanical Causes.

	Per cent
Handling material	23.32
Falls	19.90
Striking against objects	9.23
Falling material	3.53
Hand tools	3.23
Plant vehicles	2.60
Burns	1.38
Electricity	.57
Flying objects	.47
Vehicles	.29
Poisonous substances	.28
Other Accidents	1.15
<b>Total Non-mechanical causes . . .</b>	<b>65.95</b>

### Fine Goods Situation Much Brighter

Boston, Mass.—New England fine goods mills are now doing the greatest volume of business in years. Conditions today, the manufacturers declare, are more favorable for reasonable profits than at any time since 1920. Stocks on hand are the smallest many of the textile men have known. Consumption is ahead of production for the first time since the war and orders are being received for deliveries as far in advance as December.

More than 108,000,000 yards of fine goods were sold in the first three months of 1927, according to figures from a group of the New England mills obtained by the National Association of Cotton Manufacturers. This total shows a gain of 44 per cent over same period in 1926. Last year sales for this group amounted to 286,000,000 yards, and if the demand continues through this year as up to the present, the total for 1927 will be in the vicinity of 432,000,000 yards, or an increase of 51 per cent over 1926.

Stocks on hand do not average a total week's production. In some lines of high grade fabrics an actual shortage exists. More than half the sales being made are for deliveries some months ahead, many of them for the fall and some even into December.

Profits are declared to be better than they were four months ago but they are still below a reasonable return for the mills in a number of lines. This situation, it is explained, is the aftermath of the long period of depression when mills sold at cost or at times, below production costs rather than close down and leave their workers without employment. Shutting down mills, the manufacturers say, means a greater loss through payment of expenses than is experienced by selling at or near production costs.

Brisk buying developed last September but with the drop in raw cotton there came a lull which continued until about the first of this year. Mills that had made a profit during 1926 saw this disappear with the taking of inventories because of the difference in the cost of cotton when they purchased it and quotations at the end of the year.

#### Shorter H. Truitt.

LaGrange, Ga.—Shorter H. Truitt, 70, prominent LaGrange banker and textile man, died here at the home of his sister, Miss Anna Truitt, late Sunday night, after a long period of declining health.

Mr. Truitt started business in LaGrange as a dry goods merchant with Joe H. Edmundson. He had been connected with the large cotton mill development in LaGrange and was for a number of years vice-president of the Callaway Mills here. Mr. Truitt was a director of the LaGrange National Bank, the LaGrange Savings Bank, and vice-president and director of the Security Warehouse Company. He was never married and devoted his entire life to the industrial and financial development of LaGrange.



GERARD SWOPE

## BUSINESS PAPERS —spokesmen for industry

"THE interpretation of the ethics and ideals of business and industry to the public," said Gerard Swope, president of the General Electric Company, at the last Associated Business Papers Convention, "can have no better mouthpiece, can have no better spokesman, than the technical and business press."

This publication you hold in your hand is a business paper. The publisher and his editors and advertising men are a part of the industry which they serve intimately, acquainted with the technical, professional, or trade practices and methods of that industry, or business or vocation.

The editors pick out of the many phases of the flow of trade, news and policy trend in methods or machinery which will best serve the reader's needs. The advertising pages are a huge many-leaved coupon on the editorial section. And above all, the paper as a whole seeks to express the higher purposes and objectives of the small and large business men it serves.

For as Mr. Swope further said in his fine analysis of industry responsibility in this same address:

"It isn't necessary to be big to be successful, but it is absolutely essential to be successful to be big. You can't grow without that."



The A. B. P. is a non-profit organization whose members have pledged themselves to a working code of practice in which the interests of the men of American industry, trade and professions are placed first—a code demanding unbiased editorial pages, classified and verified paid subscribers, and honest advertising of dependable products.

THE A. B. P.

## Plans for Atlantic City Meeting

Plans for the annual meeting of the American Manufacturers Association and the joint meeting to be held with the National Cotton Manufacturers Association in Atlantic City, May 12 and 14, are rapidly being completed. The program for the meeting will be of unusual interest and there is every indication that the attendance will be very large.

Southern mill men are showing much interest in the convention of the American Association and this interest is heightened by the fact that the organization will hold a joint session with the mill men from New England. Reservations now being made for the convention show that the attendance will include a great many of the leading manufacturers from both sections of the country.

### American Association.

A meeting of the Board of Government of the American Cotton Manufacturers Association on the night of May 12 will precede the first of the separate sessions held by the organization. The first regular session will convene at 10 a. m. on Thursday, with President Jas. P. Gossett presiding.

After the announcement of committee appointed for the convention, President Gossett will make his address. Mr. Gossett has been exceedingly active in association work during the year and on account of his prominence in the industry and his

capacity for leadership, his address is being anticipated with a great deal of interest.

Two other addresses will feature the first session. Dr. C. E. Brooks, president of North Carolina State College, at Raleigh, will make an address and is to be followed by an address by James A. Emery, of Washington, general counsel for the National of Manufacturers.

Distribution and sales questions that confront the manufacturers as the result of changing conditions in the industry will be discussed at the joint meeting Friday afternoon, May 13, in the Hotel Traymore. The speakers will point out the problems of merchandising and suggest what might be done to bring about improved conditions between the manufacturers and distributors.

W. M. G. Howse, of Wichita, president of the National Wholesale Dry Goods Association, will present opinions and suggestions of members of that organization. President M. J. Warner and Vice-president Harry Lauten, of the Converters' Association will join in the discussions. President William B. MacColl of the National Association of Cotton Manufacturers will preside.

Styling and the interest aroused in cotton fabrics by the traveling style show of the National Association will be the subject of an address by Miss Laurice T. Moreland, at the separate meeting of the National Association on Friday morning.

Miss Morehead conducted the journeying fashion revue during its

three month tour of cities in the North, South and Middle West this year. In her talk she will speak of the reception accorded this innovation in the industry which was described in the cities visited as being the best demonstration of dress fabrics ever given.

The two associations will attend a banquet on Friday night, May 13, at 7 p. m., to be given under the auspices of the National Council of American Cotton Manufacturers. Stuart W. Cramer, joint chairman, will preside and Jas. P. Gossett will act as toastmaster.

Walker D. Hines, president of the Cotton-Textile Institute will make an address outlining the work and future plans of the Institute.

Spencer Turner, president of the Cotton Textile Merchants Association this banquet and there will be several of New York will also speak at several addresses by prominent members of the American National Association.

The American Cotton Manufacturers Association will hold its regular business meeting on the morning of May 14. Reports of the officers and of the various committees will be made at this session and a number of important business matters will be disposed of.

## Charlotte and the Rotarians

Charlotte rang the bell twice in the annual district conference of Rotarians at Spartanburg this week, in landing the next annual meeting

of the 58th district and in the honor that comes to one of her citizens, David Clark, who was selected for next district governor.

The annual district conference here next spring will be one of the most important conventions of the year in this convention city. It may be expected that nearly 1,000 Rotarians from all over western North Carolina and all over South Carolina—representative men from all the professions and all lines of business—will come here to attend the two-day conference. The Rotarians are a live bunch of men of high ideals who are doing things worth while in their home communities and who stand for the best in community life and progress.

The honor that comes to Mr. Clark is well bestowed. Mr. Clark is representative of the highest type of Charlotte's citizenship and has long exerted an important influence for the promotion of the industrial development and prosperity of the Carolinas. He was a charter member of the Charlotte Rotary Club, organized in 1916, and was its president for one term. — Charlotte Observer.

## Commending Our Editorial of 21st

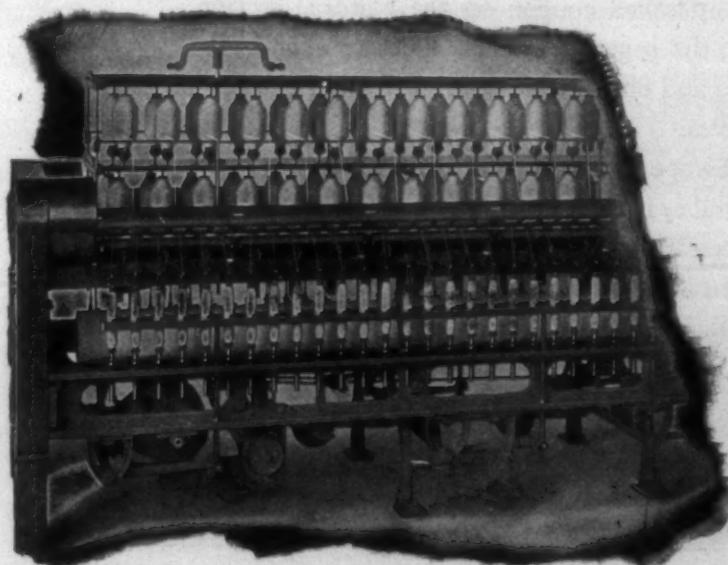
The following is an extract from a letter from the president of two mills:

"Just a line to let you know that I think your issue of Southern Textile Bulletin of April 21st the most valuable that you have ever sent out.

# H & B AMERICAN MACHINE CO.

Pawtucket, R. I.

Southern Office: 814-816 Atlanta Trust Co. Bldg., Atlanta, Ga.



*Builders of*

## Improved Spinning Frames

*Band or Tape Driven*

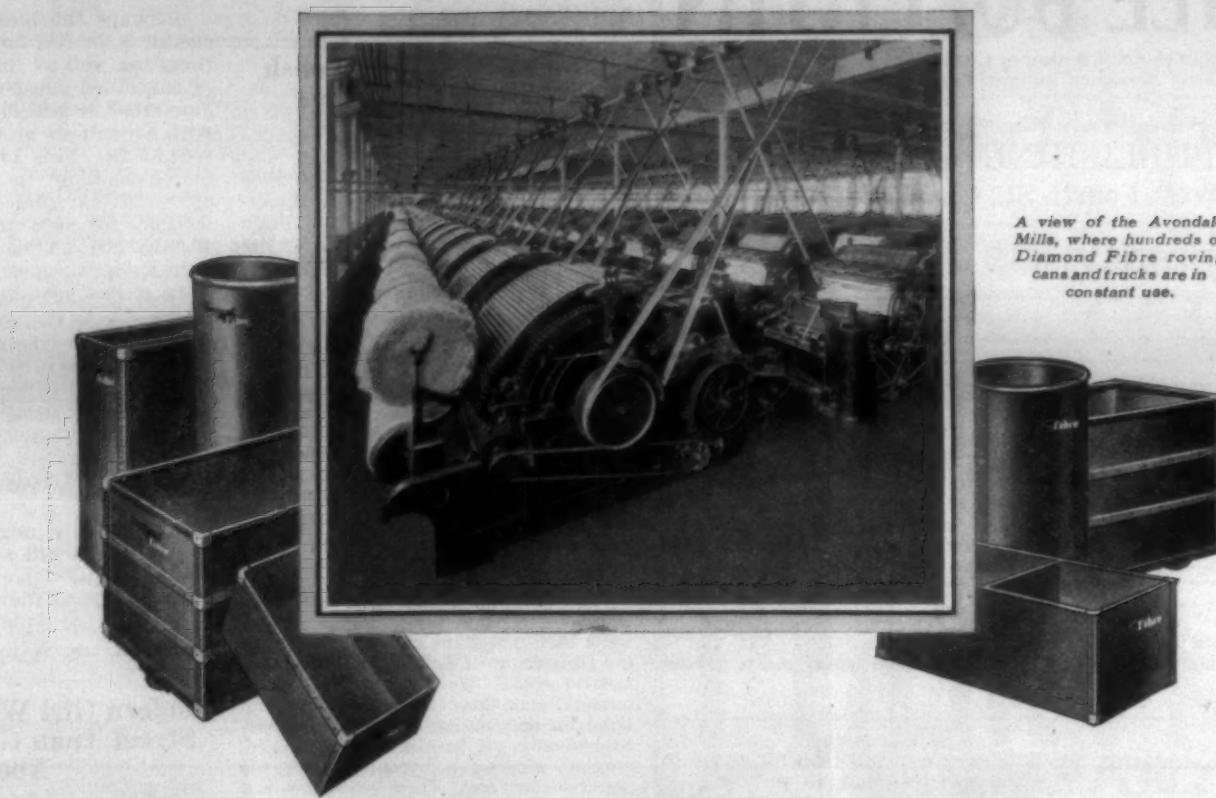
The illustration shows the Head End Section of our Improved Spinning Frame, with New Pattern Builder and Pick Motion. Our machines are of Extra Heavy Construction to withstand high speeds without vibration, thus insuring light running and reduced cost in operation.

We build these machines in all gauges, with either Lever Weighted or Self Weighted Top Rolls.

There are many valuable features embodied in our machines that we would be glad to describe.

*Illustrated Bulletin with List of Users sent on Request*

# COTTON MACHINERY



*A view of the Avondale Mills, where hundreds of Diamond Fibre roving cans and trucks are in constant use.*

## Diamond State Fibre Quality is Apparent at a Glance

*Quality which is unquestionably proven by the superior service these better industrial receptacles are rendering thousands of Manufacturers*

*A partial list of the  
Industries Served by  
Diamond Fibre  
Receptacles*

Bakeries  
Flour Mills  
Dyes and Chemicals  
Sugar  
Textile  
Paint  
Explosives  
Machinery  
Paper  
Fibre  
Tobacco  
Hospitals  
Rope  
Rubber  
Automobiles  
Meat Packing  
Metal Specialties  
Oil Cloth  
Railroads  
Breweries

REAL QUALITY cannot be concealed. This famous Diamond Fibre "family" of industrial receptacles—every one smooth-faced, light, husky and long wearing—reflect their built-in quality in each shining surface.

Textile plants by the hundreds, as well as manufacturers representing more than 50 different industries, have selected Diamond Fibre Receptacles for the better, easier handling and greater protection of their products during every phase of manufacture.

The records of long service and enduring quality that these receptacles have accomplished for such manufacturers, have been responsible for the origin of a new measuring stick of value in handling equipment—the original cost divided by the number of years which they will continue to do this better job.

This is the only way *you* should select the industrial receptacles to serve your plant needs. When you do, *you, too, will select the Diamond Fibre "family".*

The list of Diamond Fibre Receptacles includes roving cans, gill cans, bobbin boxes, trucks, waste hampers, mill boxes, doffing cans, mill baskets, barrels, trays, shipping boxes and sample cases.

DIAMOND STATE FIBRE COMPANY, Bridgeport, Pennsylvania  
*Offices in the principal cities and in Canada*

**Diamond**  
**Fibre**  
RECEPTACLES for INDUSTRY

# SOUTHERN TEXTILE BULLETIN

Member of Audit Bureau of Circulations  
Member of Associated Business Papers, Inc.

Published Every Thursday By  
**CLARK PUBLISHING COMPANY**  
Offices: 18 West Fourth St., Charlotte, N. C.

THURSDAY, MAY 5, 1927

DAVID CLARK  
D. H. HILL, JR.  
JUNIUS M. SMITH

Managing Editor  
Associate Editor  
Business Manager

## SUBSCRIPTION

One year, payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

## ADVERTISING

Advertising rates furnished upon application.  
Address all communications and make all drafts, checks and money orders payable to Clark Publishing Company, Charlotte, N. C.

## The Carded Yarn Meeting

WHILE every mill man is apt to contend that his particular branch of the cotton manufacturing industry is the most unprofitable, we believe that the carded yarn division can, in truth, be said to be in the most deplorable condition.

We have heard it stated and believe it to be true that during the past four years there have been less than three months during which a mill on 20/2 yarns could sell yarn and buy cotton the same day and make a profit.

When we first met Walker D. Hines, President of the Cotton-Textile Institute, we told him that the hardest nut he would have to crack would be the carded yarn situation.

Not only are selling conditions and practices in the carded yarn business deplorable, but the mill manager when making prices, has nothing upon which to determine his course of action except the representation of the buyers or their agents, the so-called commission men.

He does not know whether the sales of yarns are increasing or decreasing or whether stocks of yarns are increasing or diminishing.

Very few have much idea of the cost of the yarns they are selling, and many juggle the figures that they do hold so as to make the cost fit, on paper, the prices they feel inclined to accept.

Not over 5 per cent of the carded yarn mills operate on less than 16 per cent net waste. We know that many claim to have less waste and we recently heard a very prominent yarn manufacturer state that his waste during the past year was only 10 per cent, but we dare say such mill to submit their books to a competent auditor and attempt to get from him a statement to the effect

that his waste during the period of a year ran less than 15 per cent.

We have also seen a letter from a manufacturer who does know his costs saying that many yarn mills were deceiving themselves by using low grades of cotton and not making allowance for the excessive and extra waste from such cotton and he gave surprising figures based upon actual tests.

All of this brings us to the meeting of the Carded Yarn Spinners in Charlotte on Wednesday of this week with Walker D. Hines, president of the Cotton-Textile Institute.

The meeting was well attended and there were very few carded yarn spinners who were not present.

Like other meetings of these men there was much talk, but this time there was a difference because as chairman there was a man who has been employed to stabilize the cotton manufacturing industry and in whom all cotton manufacturers have extreme confidence.

It was decided to form a Carded Yarn Division of the Cotton-Textile Institute and those who are to represent the Southern mills were selected.

Almost all of those present signed pledges that for a period of one year they would furnish statistics of yarn production, yarn stocks, sales, etc., and in return would receive from the Institute the consolidated statistics.

In spite of the pessimism that has been formed as the result of many previous efforts to perfect and maintain an effective organization, we believe that this time a definite step forward has been taken.

Mr. Hines is a man who proceeds cautiously and can not be hurried, and some may become impatient at the progress being made, but we are confident that if they will be patient and have confidence in Mr. Hines he will put the industry upon a more

profitable basis than has existed during the past four years.

We urge the carded yarn spinners of the South to forget the disappointments of the past and make a real effort to save their industry.

## Women Seek To Abolish Federal Child Labor Bureau

THE "Daughters of 1812" a patriotic organization met in Washington, D. C., last week, among other resolutions passed, one called for the Children's Bureau of the United States Department to be abolished.

An extract from the Washington Post says:

"The children's bureau of the Department of Labor was described as a 'socialistic and communistic agency' and its abolition urged in a resolution adopted by the National Society, United States Daughters of 1812, at the Willard Hotel. The resolution said that the bureau represented the 'peak of our bureaucratic despotism.'"

The following also appeared in the Post:

"To the Editor of The Post—Sir: The Daughters of 1812 strike the right note when they charge the children's bureau of the Department of Labor with being a socialistic school. We claim to be afraid of socialism and have attempted to clamp down the immigration bars against socialistic advocates, yet have maintained at government expenses a bureau teaching the pernicious doctrine. There is not now, and never has been any need of the children's bureau. Let an end be put to it."

MRS. L. M. SCUDDERY.

With all of this we are in full accord for we do not believe that the Department, over which Miss Grace Abbott presides has ever accomplished any good or done anything worthwhile.

## North Carolina Revenues Increase

WITH no wish to boast but with the desire to call to attention of other Southern States that have been less progressive, the fact that prosperity follows in the wake of wise expenditures for good roads and schools, we note the following relative to the present tax situation in North Carolina:

"Indications of the State's undiminished prosperity, if not of increasing prosperity, are found in the revenue collections for April amounting to \$573,827.91, which is \$132,997.24 more than collections for April, 1926, when the collections amounted to \$440,830.67. But this is not all. Income tax collections so far through April are greater than the total collections for 1925-26, by almost \$100,000, and the total amount of revenue collected to date—\$11,717,445.97—is \$476,536.40 greater than the total revenue collected through April 30, 1926, when the books show that \$11,640,909.57 had been collected.

Thus it would seem that the State is well on the way toward another good sized 'credit balance' when the end of the present fiscal year arrives on June 30. Whether this surplus or 'credit balance' will amount to \$2,000,000 or not cannot be accurately foretold as yet, but indications are that if a surplus of

Thursday, May 5, 1927.

nearly \$1,500,000 was piled up last year, that a surplus of \$2,000,000 should accrue this year, especially in view of the increase in the size of the collections.

"Perhaps the most surprising increase is in the income tax collections—as well as the best indication of continued prosperity in the April amounted to \$403,455.86, as compared with collections in April, 1926, of but \$304,135.79. This brings the income tax collections to date to \$6,122,869.83, while total income tax collections for 1926 amounted to only \$6,083,577.06. Thus collections to date have exceeded the total collections of last year by \$39,392.69.

"Thus with two more months during which revenue will still be coming in, there is every indication that the total collections of \$12,972,183.97 of the fiscal year of 1925-26 will be surpassed, and that this year's collections will be well in excess of \$13,000,000, perhaps even \$14,000,000."

In addition it might be mentioned that a recent sale of North Carolina bonds was at 4 per cent, the lowest rate on record for the State.

Good roads and schools do not bankrupt any State.

## Modern Girl Wears Less On Street Than Grandmother Abed

THE following recently appeared in New England paper:

"The pretty girls of today wear less on the streets than their grandmothers wore in bed," remarked Channing H. Cox, ex-governor of Massachusetts, factiously at the annual banquet of the New Britain Chamber of Commerce in discussing the slump in the cotton and textile industry in New England.

Mr. Cox declared, in reviewing the faults of New England, that its people will have to boost their country and adopt the spirit of the West, where the booster spirit is strong. He also said New England must capitalize on its facilities and her chambers of commerce must be supported and strengthened "because it takes more than moral support to put New England across."

## David Brown Co. To Use Cotton Bagging

THE David Brown Company, of Lawrence, Mass., well known makers of bobbins, spools and shuttles, are making plans to use cotton bags for shipping their products, the bags to replace burlap bags. The company is now experimenting with cotton fabrics and expects to be able to utilize osnaburghs or single filling duck bags in place of burlap and to succeed in standardizing on the cotton.

The David Brown Company is taking this step in order to aid in the movement for a larger consumption of cotton goods and to help in the work of replacing burlap with cotton wherever it is possible.

The company is to be highly commended for its action, especially in view of the fact that the cotton bags cost more than the burlap and we feel sure that mill men will appreciate its efforts to aid in the campaign to find more uses for cotton goods.



## MILL NEWS ITEMS OF INTEREST

**Thomaston, Ga.**—Thomaston Cotton Mills will install 100 Duplex humidifiers manufactured by American Moistening Company, Providence, R. I.

**Gastonia, N. C.**—Manville-Jenckes Company, Loray division, will completely revamp their humidification system and install 200 Duplex humidifiers and 35 Amco humidity controls. American Moistening Company, Providence, R. I., is the contractor.

**Marion, N. C.**—The Cross Cotton Mills are rapidly increasing an addition which will have 47 Saco-Lowell cards, 4,000 new Whitin spindles, and necessary winders. The company is also making a number of other improvements in the mill and village.

**Woodruff, S. C.**—The addition to the Mills Mill No. 2, located here, which will cost \$750,000, will be exempt from municipal taxes for a period of five years, the exemption having been voted at a special election held for the purpose.

It is expected that the contract for the addition will be let soon.

**Cleveland, Tenn.**—The Weiss Hosiery Mills, recently purchased by Shreve and Adams, 86 Leonard street, New York, and Clyde Wilkins, of Chattanooga, as noted, will be enlarged and new equipment installed to increase the monthly capacity to 20,000 pairs of men's hose. A new company will probably be organized as an operating company, officials to be elected later.

**Burlington, N. C.**—The National Dye Works will spend about \$100,000 to enlarge its buildings and equipment. The present boarding department will be increased from one to three stories and extended over the space now occupied by the power plant. The later will be moved across the street to a brick building owned by the company.

The company, which dyes and finishes hosiery, finds it necessary to expand in order to take care of the steady increase in its business. E. M. Long is manager of the company.

**Greenville, S. C.**—Construction of the new plant at Marietta, near here, by S. Slater & Sons, of Webster, Mass., will be started as soon as Greenville and Northern Railway can be rebuilt near the site. Plans are being prepared by J. E. Sirrine & Co., of this city.

The mill, as reported last week, will have 30,000 spindles and 700 looms for the manufacture of broadcloths and sateens. The cost is estimated at about \$2,000,000 and the large bleachery and finishing plant to be erected later will probably bring the total investment up to around \$7,000,000.

### FRED'K VIETOR & ACHELIS COMMISSION MERCHANTS

65-69 Leonard St.  
New York

### DICKSON & VALENTINE DEPT.

### THE FARISH COMPANY COMMISSION MERCHANTS

100 WORTH STREET  
NEW YORK

### BARBER-COLMAN COMPANY General Offices and Plant Rockford, Ill., U.S.A.      Knotters Framingham, Mass.      Warp Tying Machines Greenville, S.C.      Warp Drawing Machines Automatic Spoolers High Speed Warpers



#### One Cent Will Solve Your Traveler Problem



Write your traveler problem on a one cent government card and send it to us.

No matter how many travelers you've tried or why they failed, we may have or can make one that meets your requirements.

#### VICTOR RING TRAVELER COMPANY

20 Mathewson St.

Southern Agent, A. B. CARTER  
Room 615, Third Nat. Bank Bldg., Gastonia, N. C.

Providen

Members American Society Landscape Architects

### E. S. DRAPER

1516 E. Fourth St.  
CHARLOTTE, N. C.

101 Marietta Bld.  
ATLANTA, GA.

#### LANDSCAPE ARCHITECT and ENGINEER

Town Planning and Mill Villages —  
Real Estate Subdivision and Re-  
sorts  
Country Clubs and Golf Courses  
Private Estate and Home Grounds  
Parks, Playgrounds and Cemeteries

Complete Topographic Sur-  
veys  
General Designs, Grading  
and Detail Plans  
Supervision of Landscape  
Engineering Construction

Largest Landscape Organization in the South

**Woodruff, S. C.**—The Woodruff Cotton Mills have completed the erection of 75 new cottages in the mill village.

**Burlington, N. C.**—The Burlington Mills, Inc., have paid a dividend of 2½ per cent on the common stock, this being the second dividend paid this year.

**Knoxville, Tenn.**—Knoxville Handkerchief Manufacturing Company has started business on the second floor of a building at Broadway and Depot avenue. The present output is 250 dozen of handkerchiefs daily. L. D. Schultz, past president of the Burlington Business Men's Club, heads the company. The handkerchiefs carry the company's trademark, "Smoky Mountain Brand."

The company in the near future will add departments for manufacturing belts and neckties under the same brand.

**Maysville, Ga.**—A company has been organized at Maysville for the purpose of building a cotton mill to be run by the hydro-electric power now being generated at Hurricane Shoals, three miles from Maysville, off the Oconee river. The officers elected are:

Dr. L. G. Hardman, of Commerce, Ga., president; W. F. Morris, vice-president, and chairman of the board; W. P. Cooley, secretary, and J. W. Shepherd, treasurer.

Ten per cent of the subscription was called to be paid by May 10. A site consisting of 42 acres has been secured along the Southern Railroad east of the depot, and work of surveying will commence at once.

**Statesville, N. C.**—Ground will be broken this week for the plant of the Phoenix Mills, Inc., which will be moved here from Little Falls, N. Y. The buildings will be erected by the Grier-Lowrance Construction Company, of Statesville, for the Irredell Development Company, which was organized locally to erect the building. Construction work will be started as soon as plans are completed by Lockwood, Greene & Co. engineers.

## LA SOIE DE CHATILLON

Soc. An. Italiana—Capital 200,000,000 Lires—Milan, Italy

## RAYON (Viscose).

DAILY OUTPUT 50,000 lbs.

"SERIS"  
Artificial Schappe

ARTIFICIAL STRAW

SOLE SELLING AGENTS AND DISTRIBUTORS U. S. A.

"CHATILAIN" Artificial Wool

## ASIAM, Inc.

59 Pearl St., New York City      Whitehall 8572-8389  
John L. Davidson, Southern Representative

resumed on the  
Rock Textile Company Mill,  
which has been delayed for ten days  
on account of the high floods of the  
Arkansas river. The building will  
be rushed to completion.

Burlington, N. C.—The Victory  
Hosiery, owned by W. W. Brown,  
H. Frank Mitchell and Walter  
Brown, has purchased 100 additional  
knitting machines. The plant is  
operated on novelty hose.

Athens, Ala.—The increase in  
equipment to be made at the Well-  
man Cotton Mills will include 6,672  
spindles and 120 knitting machines.  
The control of the mill was recently  
purchased by the same interests  
that operate the Volunteer Knitting  
Mills, Chattanooga, Tenn.

Orangeburg, S. C.—The Santee  
Cotton Mills here is installing 200  
new looms to take the place of a  
similar number of looms that have  
been in use at the plant for a quar-  
ter of a century. The new looms  
are wider than the old, being equipped  
to turn out 40-inch sheeting, and  
will increase the output of cloth.

The Santee Mill is not being op-  
erated full time, days only, as night  
work is undertaken only to fill  
special orders.

Southern Power to Build  
New Plant

A new hydro-electric plant with a  
generating capacity of 56,000 horse-  
power, will be built immediately on  
Catawba River at Oxford Shoals near  
Claremont, by the Southern Power  
Company, it was announced from  
Charlotte.

Contracts have been let for the  
equipment of the plant and much of  
the preliminary work has already  
been done. The plant, the cost of  
which has not been announced, is  
expected to be in operation by June  
1, 1928.

This will be the twelfth hydro-  
electric plant built upon the Cataw-

"PEP"  
WANTED

Have you the pep to put  
behind a well known  
brand of belting, the rap-  
idly increasing demand  
for which calls for addi-  
tions to the Southern sales  
force? If you have, ad-  
dress the facts to M. S. B.,  
care this paper.

ba River by the Duke interests. The  
total generating capacity of all of  
them will be 651,000 horsepower.

The Southern Power Company it  
was stated, recently has contracted  
for the entire output of the new 45,-  
000 horsepower hydro-electric plant  
of the Tallahassee Power Company at  
High Rock on the Yadkin River and  
this plant will be operated as a part  
of the Duke system. The construc-  
tion department of the Southern  
Power Company is building the High  
Rock plant for the Tallahassee Power  
Company. The plant is expected to  
be in operation during 1928.

Mill Building in South  
Carolina

Greenville, S. C.—Mill construction  
projects under way or planned in  
the State's piedmont section, of  
which Greenville is the center, total  
upward of \$5,000,000, according to in-  
formation compiled here.

The largest and newest project is  
the Slater plant, to be erected at  
Marietta at a cost of \$2,000,000, with  
30,000 spindles and 700 looms, and  
possibility of further enlargement.

Next comes virtual doubling of  
Mills Mill No. 2 plant, Woodruff.  
Work will begin soon, with total  
outlay of about \$750,000.

Construction of the new Gossett  
Dyeing and Finishing plant at An-  
derson, is well under way. Plans  
call for an expenditure of around  
\$150,000.

The Ninety Six Mills are nearing  
completion and will soon begin with  
65,000 spindles.

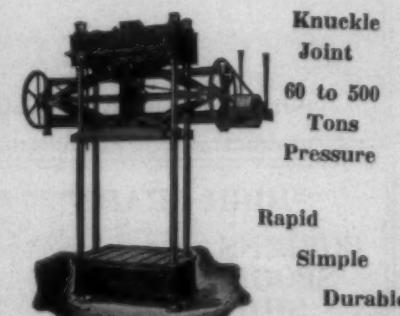
Greenwood Mills, Greenwood, are  
being enlarged, with 5,000 additional  
spindles.

Opener rooms are being construct-  
ed at the Watts Mill, Laurens; the  
Toxaway Mills, Anderson, and the  
Williamston Mill, Williamston. A  
large sum will be expended at each  
plant.

Seventy new operative houses are  
being built at the Appleton Mills,  
Anderson, and the Whitmire Mill, 35  
at the former and 25 at the latter,  
an aggregate cost of about \$105,000.

The Enoree Converting Company,  
recently formed at Pelham, is in-  
stalling machinery at a cost of  
\$25,000. The Seneca Mill, recently  
doubled, is now completed, and the  
entire plant is in daily operation.

## BALING PRESS



Established 1872

Let us tell you more about them.

Dunning &amp; Boschart Press Co., Inc.

367 W. Water St.

SYRACUSE, N. Y.

Reliable Humidifying Devices  
*Since 1888*

## AMERICAN MOISTENING COMPANY

Atlanta  
GeorgiaBoston  
MassachusettsCharlotte  
North CarolinaGreenville  
South Carolina

## VICTOR MILL STARCH — The Web



It boils thin, penetrates the warps and carries the weight into cloth. It means good running work, satisfied help and one hundred per cent production.

We are in a position now to offer prompt shipments.

## THE KEEVER STARCH COMPANY

COLUMBUS, OHIO

DANIEL H. WALLACE, Southern Agent, Greenville, S. C.

C. B. ILER, Greenville, S. C.

L. J. CASTILE, Charlotte, N. C.

INSPECTING  
SEWING  
BRUSHING  
SHEARING  
SINGEING  
PACKAGING  
FOLDING

### Curtis & Marble Machine Co.

Textile Machinery  
Cloth Room and Packaging Machinery  
WORCHESTER, MASS.  
SOUTHERN OFFICE  
1000 Woodside Bldg.

Greenville, S. C.

DOUBLING  
MEASURING  
WINDING  
STAMPING  
TRADEMARKING  
CALENDER  
ROLLING

## "COLUMBUS TAPE"

RUGGED CONSTRUCTION      SERVICE  
GEORGIA WEBBING & TAPE CO.      COLUMBUS, GA.

Established 1896

Incorporated 1914

## LOWELL SHUTTLE COMPANY

Manufacturers of  
BOBBINS      SPOOLS      SHUTTLES

Write or Telegraph for Quotations

Office and Factory: 19 Tanner St., LOWELL, MASS.

"HIGH GRADE"  
BOBBINS  
SPOOLS  
SHUTTLES  
SKEWERS  
ROLLS, ETC.  
OF EVERY DESCRIPTION

## THE DAVID BROWN COMPANY

Lawrence, Mass.

Correspondence Solicited

Catalog on Request

AUTOMATIC SHUTTLES  
Our Automatic Shuttles are giving Perfect Satisfaction in Leading Mills throughout the country on all classes of work.

## To Stay in the Game, Scrap Old Looms

THE Draper Corporation, through its publication "Cotton Chats," gave its following advice relative to old equipment:

When you hear that your competitor's weavers are running 36 or 48 or 72 or 100 looms each, what do you do?

When satisfied that your machinery is too much out of date to enable you to meet present day competition, what do you do? Buy new equipment?

"My mill hasn't the money."

The man who said this a few years ago, his mill and his stockholders have less money today than they had then. They have allowed a good investment to fade away.

The textile industry is one of the oldest industries in this country. Age accumulates traditions.

Traditions usually mean ruts, and ruts are the dry rot of industrial progress.

The textile industry is now, and will continue to be in the years ahead, a very uncomfortable place for the man who has got himself and his business into a rut.

So also of any other business.

See what happened to the railroads when they skimped on plant renewals for a few years.

The leading units of the steel industry spend vast sums in plant and equipment renewal; and as a result boast that they can compete with the world.

There isn't a manufacturer building automobiles with his equipment of five years ago.

In spite of the age of the textile industry, progress in its machinery has been rapid during the past quarter century. During this time the industry has spent less in scrapping old and installing new machinery, size of investment considered, than any other large industry.

When should a textile manufacturer scrap his old machinery and buy new?

For a concrete example, let's talk about looms?

If your looms do not produce as much cloth, do not produce as good cloth and do not produce it as cheaply as the looms of your competitor, your profits and your prosperity are in danger.

You know what your looms are doing. You can find out what new looms will do.

When you have done this, you may find that a few new attachments would still leave you handicapped, don't patch, but change.

The age of your looms, be they one year old, five or thirty-five, has little to do with the question of renewal today. They do not wear out physically until long after they have become dead weight economically.

Keeping your mill equipped for economical production is the only reason for scrapping and renewing machinery.

The urge to buy a new automobile is incited and fostered by the appeal to the eye of something that looks different and new.

Automatic looms look very much alike whatever the vintage, except for a few early models. It is a basic rule in our shop that new parts and new devices must be standardized to machines now in use. We would destroy as little of the old machine as possible.

New looms look very much like older ones. A newly equipped weave room looks very much like an old one.

The urge to buy is not fostered by style appeal or beauty of lines.

Keeping machinery modern is an economic problem with no side appeals or seasonable incitements. It is likely to be neglected by those without a fixed purpose to appropriate annually for equipment maintenance.

The problem of knowing when to scrap and replace is settled by answering a very simple question:

Is your machinery affecting your profits?

If your weavers cannot run as many looms as any of your competitors on a similar weave, it is.

The refinements of the modern Northrop looms make it possible to run more looms per weaver than with the loom sold a few years ago; to make better cloth; to keep down the cost of repairs and supplies; to increase the number of looms per fixer.

These refinements mean as much to the industry in reducing costs as the original invention.

They are the result of practical application of the original invention through years of experience on nearly 500,000 looms and study by our research department of problems presented by the mills operating these looms and the great variety of weaves produced on them.

They are the results as well of developments in all other industries that could be made of advantage to the textile manufacturer.

### Lee M. Jordan

Atlanta, Ga.—Lee M. Jordan, 51, one of the most prominent business men in Atlanta, and president of the Gate City Cotton Mills, died Tuesday morning at his home, 1055 Peachtree Street, following an illness of several months.

Mr. Jordan was a native Georgian, born and reared in Hawkinsville. He came to Atlanta about 30 years ago, and since that time had been prominently identified in business and civic circles of the city.

For the last seven years Mr. Jordan had been president of the Gate City Cotton Mills. He was a past president of the Atlanta Rotary Club, a member of the Chamber of Commerce, the Capital City Club, the Druid Hills Club, Atlanta Athletic Club, a past president of the Georgia Cotton Mill Association, and a member of the North Avenue Presbyterian Church, of which he was a deacon and the treasurer.

Besides his wife, Mr. Jordan is survived by three daughters, Mrs. D. A. Denick and Miss Julia Jordan, both of Nicholasville, Ky., and Miss Harriette, who lives with her parents.

**Textile mills considering direct sales of their production in the finished state to the wholesale, the retail, or the cutting up trades, can eliminate credit risks and keep distributing costs at a minimum through using the services of the Textile Banking Company.**

**Sales are converted into cash immediately upon shipment of goods.**

*Correspondence or interviews with reference to selling and factoring textile mill production invited.*

## Textile Banking Company

### FACTORS

50 Union Square  
New York



# B.S. Roy & Son Co.

Established 1868  
Worcester, Mass.

Carding is one of the first important operations in a spinning mill, and if the card is not properly ground, it cannot produce good work and does not give the stock a fair start through the mill.

As specialists for nearly sixty years in the manufacture of card grinding machinery, we are prepared to give you service based on this long experience.

To produce good work, good tools are necessary. Let us have the width and make of your cards. We are certain we can tell you something of interest.

**E. M. Terryberry, Southern Agent**  
1126 Healey Bldg. Atlanta, Ga.

## TEXTILE GRINDING MACHINERY



Have stood the exactions of all departments of the Textile Industry.

One of our latest types to become standardized is the Dye House Truck. All metal galvanized. A solution to the dye house problem.

A light, easy running, smooth carrier, but built for heavy duty work. Lane casters equipped with string guards prevent clogging.

## W. T. Lane & Brothers

Originators and Manufacturers of  
Canvas Baskets for 25 years

Poughkeepsie, N. Y.

## Saco-Lowell Ships 50,000th Card

The Saco-Lowell Shops have just shipped the 50,000th revolving flat card from their Newton Shop. In a letter to this publication the company gives some very interesting information in connection with having manufactured a total of 50,000 cards. The letter, in part says.

"There are a number of facts of interest in connection with our building 50,000 cards. We were the first ones in America to build them and our first shipment was made in 1887 to the Jackson Company, of N. H. Card No. 1 is now on exhibit at our Newton Shop. Card No. 2, which was shipped at the same time to the company, is still in operation as far as we know. Today we have built 50,000 cards in forty years, 1887-1927, an average of 1,250 cards a year. These cards have been shipped to all parts of the world.

The list of countries outside the United States where these cards have been installed is as follows:

Canada, Mexico, Columbia, Chili, Argentine, Ecuador, Venezuela, Brazil, Peru, France, Germany, Spain, Italy, Poland, Sweden, China and Japan.

Some idea of what it means to build 50,000 cards can be had from the following figures:

37,500,000 hours of labor were required. 60,000,000 bales of cotton have been carded by Saco-Lowell cards. These cards lined up end on end would make a line 100 miles. 2,590 miles of fillet twine used to clothe these cards. 8,333 freight cars were necessary to haul them. It would take one man 14,000 years to build this number of cards.

## Fine Goods Mills Busy in New England

Fine goods sold in the first three months of 1927 totalled 108,000,000 yards, a gain of 44 per cent over last year, according to a compilation of figures from a group of New England mills, obtained by the National Association of Cotton Manufacturers. Last year sales for this group amounted to 286,000,000 yards, they report. If the demand continues through this year as up to the present, the total will be 432,000,000 yards, it is estimated.

The survey states:

"Stocks on hand do not average a total week's production. In some lines of high grade fabrics an actual shortage exists. Because of this situation the hand-to-mouth buying, which has been one of the handi-

caps suffered by the manufacturer during the long period of depression has been materially lessened. More than half the sales being made are for deliveries some months ahead, many for fall, some even December. At the same time there is a general determination, textile leaders declare, not to carry stocks of goods but produce solely to meet demand.

"Better conditions than have existed in the last six years are seen by fine goods manufacturers. They declare cotton tends to higher price levels, that there is no indication of reduction in labor costs and that these factors taken together indicate the mills are in a better position to obtain prices which will insure a reasonable profit than they have been at any time since 1920.

"Cotton goods are moving well in the secondary markets and over the retail counters. The present situation in the dress fabrics market bears out the prediction by fashion experts, made earlier in the year that cotton is the style fabric for 1927.

"Profits are declared better than four months ago but still below a reasonable return for the mills in a number of lines."

## Snia's Rayon Record

Fresh testimony to the general prosperity of the rayon industry is afforded by the report from Italy's leading producer, the Snia Viscosa concern. At the present rate of daily output its president foresees an annual outturn of 35,000,000 pounds, or double that of the year 1925.

The purpose of any trust is best discovered by studying the conditions preceding its formation. Prior to the international entente arranged in the rayon industry, it had fallen on bad times, characterized by low and unprofitable prices—another way of saying that production had become excessive in relation to demand. The Italian industry being on a relatively low cost basis has been especially feared as a competitor. Hence the opportunity to draw it into a union with German and English interests was eagerly seized. The fact that it is working at high speed is due to the general prosperity resulting from a revived demand for rayon. The same thing holds true for all the leading interests in other countries. Only when reaction sets in will it be possible for the public to determine how far the rayon combine is in a position to control output.—New York Journal of Commerce.



The best Lickerins  
ever produced

J. D. Hollingsworth  
Greenville, S. C.

## Other Forms of Wages

The National Industrial Conference Board's recent report of weekly earnings of cotton mill employees in the North and South which shows those of the North up to a decided advantage should have been accompanied by statements showing that all the wages received by the Southern operatives are not in dollars and cents, according to The Greenville Piedmont, which takes the very defensible position that cash wages represent but a part of the story. Some time ago, it reminds us, the American Cotton Association compiled detailed figures which showed an average indirect weekly compensation in addition to cash wages, of \$4.36 for Southern mill owners. This figure was accepted by the finance committee of the United States Senate as correct, and the Senate as correct and the labor unions of the North have used it in support of arguments for higher wages there. So they must be true.

The indirect compensation includes the low house rent, which is rent only nominally, averaging 25 cents per room per week, this cost including water and electric lights and often sewerage. It includes the savings effected by fuel at cost, but it does not include the saving due to milder climate and to availability of gardening space and facilities.

The board's report upon wages shows an average for textile employees in the New England States of \$19.63 a week, as against an average of \$15.93 in the South. When the extra compensation is added to the Southern pay envelopes, the average is found to be \$20.29, or 66 cents more per week than the Northern operative receives.

The pay Southern workers receive in forms other than cash should always be calculated in any comparison of wages North and South.—Charlotte News.

## Spindles At a Peak

Bearing out the indication earlier given by government figures for cotton consumption and by reports of cotton cloth merchants, the government report of active spindle hours shows that in March this country's cotton industry operated at its highest point since the war. Last month spindles turned at 109.7 per cent of full single-shift capacity, slightly ahead of the previous record of 109.6 per cent in February, 1923.

It is in between these periods of high activity that the depression in the cotton manufacturing industry has made itself particularly felt. The low point occurred in July, 1924, with operation of but 60.3 per cent of single shift capacity. The rate for February of this year was 106.8 per cent, and for March, 1926, it was 102.2 per cent.

Because of the southward trek of the cotton manufacturing industry in the past four years there is a significant comparison of the position of the North and South at the two high points. At the end of last month there were 37,035,710 cotton spindles in place in the country, against 37,281,827 in February, 1923. But the South was ahead of New

England in March, with 18,075,138 spindles against 17,277,868, while four years ago New England was much in advance with 19,001,661 spindles against the South's 16,274,772.

In February, 1923, the South operated its spindles much longer than the North, but its differential was much smaller than at present. Last month the South ran its machinery 6,099,379,075 spindle hours, or almost double New England's total of 3,170,076,656 hours. But four years ago the figures were 4,573,349,374 for the South against 3,452,513,136 for New England.

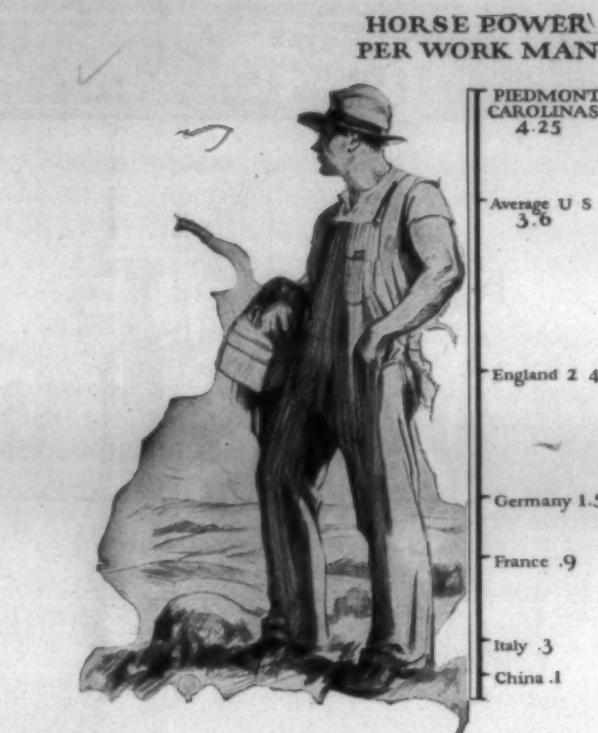
When reduced to the basis of average hours per spindle for the two periods the figures give the best picture. Thus the average spindle in the country ran 260 hours in March last against 227 hours in February, 1923. The average New England spindle ran 183 hours in March against 182 hours in February four years ago. But the Southern spindle operated 337 hours against 281—in other words, whatever improvement there was (largely accounted for by the fact of March being a longer month than February, 1923) was due to the advance of the cotton-growing States. In months of equal length, New England would be behind four years ago, and the South ahead.

It is, of course, an encouraging development that the cotton manufacturing industry should advance its activity to a new post-war high point. This is the logical result of distributors' and consumers' desire to contract for goods at the remarkably low prices recent prevailing. The best binds in the industry have not forgotten, however, that existing manufacturing facilities are greatly in excess of the country's consuming power, that the industry as a whole has by no means yet acquired a satisfactory margin of profit, and that much conservation must be employed in any further advance of manufacturing operations.—Buston News Bureau.

## Clark as Rotary Club Governor.

The Rotarians of the district composed of South and lower North Carolina have wisely chosen as their next Governor a Charlotte man, Dave Clark, who has always been one of the more intensely interested Rotarians within this jurisdiction and whose labors on behalf of the cause entitle him to such preference. He knows the duties of a District Governor, is intimately acquainted with the work to be done and is zealous enough for Rotary to go out and do a complete job of it.—Charlotte News.

Russellville, Ark.—The textile mill at Arkansas Polytechnic College has been put to work on a commercial basis, and it is hoped that it may be made to pay a good portion of its own expenses and thus kept in operation, even though the legislature for maintenance of this department of the college. The mill is being used to make twine only at present, and the output is of unusual quality because a better grade of cotton is being used than is usually made into twine.



## Where Wealth Grows at Triple Speed

Rank the leading countries of the world in the order of their industrial strength . . . and you have ranked them in the order of their horsepower-per-workman. You can readily see how it works out from this table:

China	.12	France	.97	England	2.4
Italy	.31	Germany	1.5	Total U. S.	3.6

As the horsepower-per-workman increases, prosperity increases. In Piedmont Carolinas the horsepower-per-workman is 4.25.

DOES that explain why per capita wealth is increasing there *three times as fast* as it is in many other states?

While wealth marches at the quickstep in Piedmont Carolinas, this region is far from completely industrialized. (Latest census figures show four counties with 252 industrial wage earners out of 74,000 population—less than 4/10 of 1%!)

Throughout this section, less than one-fourth of the total labor available has been recruited to industry. Three times more men are ready for jobs in mills and manufacturing plants than have them.

With so many men working on small farms, living expenses are low. Food, housing, fuel, clothing and many other items are lower. One careful estimate is that living costs the Piedmont Carolinas workman \$7 per

week less than it does the average workman in older, more highly industrialized sections of the country. And usually his standard of living is higher.

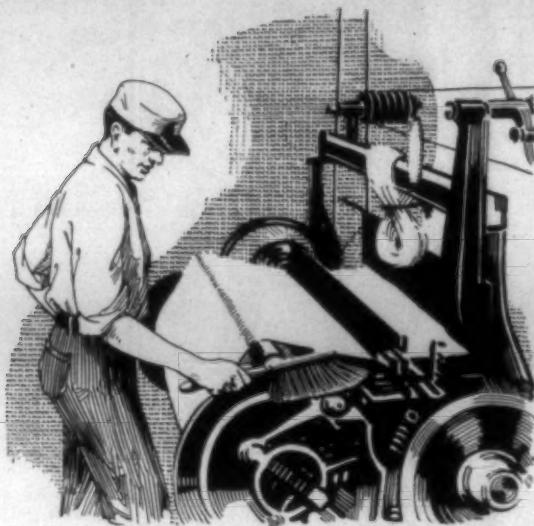
There's more elbow room. He spends many more weeks out of doors. There is a complete lack of un-American ideals.

These all help to explain why the total wealth has increased 660% in the last 20 years—33% a year. They explain, too, why alert, experienced business men have established themselves here and made relatively small investments grow into substantial fortunes.

You ought to have all the facts about Piedmont Carolinas—"Where Wealth Awaits You." You can get just the information you want by writing to our Industrial Department, Room 1102, Mercantile Building, Charlotte, N. C., which gladly places its facilities at your service.

## DUKE POWER COMPANY

{ OWNERS OF SOUTHERN POWER COMPANY, SOUTHERN PUBLIC UTILITIES COMPANY AND ALLIED INTERESTS }



## Good Brushes for Good Machinery

To keep good machinery in the highest state of efficiency requires good brushes. Perkins' Practical Brushes are good brushes. They are as essential in the modern textile plant as is good machinery. We make them good because we know what textile men want. We went into the mills to find out. We asked the operatives and the purchasing agents. Then we came back and designed the brushes. Now more than 90% of all Southern Mills use them. Every one that leaves our factory is backed by our iron-bound guarantee of satisfactory service.

Write today for illustrated folders and price lists.

*For every textile need, we make a suitable Brush*

Atlanta Brush Co. Atlanta, Ga.

Guaranteed  
Textile  
Brushes



E. H. JACOBS MFG. CO., Danielson, Conn.  
Southern Factory Branch, Charlotte, N. C.      Established 1869

## Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

	Page
—A—	
Acme Sales Co.	38
Akron Belting Co.	31
Allis-Chalmers Mfg. Co.	—
Aluminum Company of America	—
American Bobbins Co.	—
American Cellulose & Chemical Mfg. Co., Ltd.	—
American Kron Scale Co.	—
American Moistening Co.	25
American Textile Banding Co.	39
Amory, Browne & Co.	36
Arabol Mfg. Co.	—
Arnold, Hoffman & Co.	39
Ashworth Bros.	42
Asiam, Inc.	25
Associated Business Papers, Inc.	19
Atlanta Brush Co.	30
Atlanta Harness & Reed Mfg. Co.	34
—B—	
Bahnsen Co.	—
Bancroft, Jos. & Sons Co.	24
Barber-Colman Co.	—
Bell, Geo. C.	14
Bond, Chas. Co.	—
Borne, Scrymser Company	—
Bosson & Lane	—
Bradley, A. J. Mfg. Co.	—
Briggs-Schaffner Co.	26
Brown, David Co.	—
Butterworth, H. W. & Sons Co.	—
—C—	
Carrier Engineering Corp.	38
Catlin & Co.	37
Charlotte Leather Belting Co.	—
Charlotte Manufacturing Co.	—
Chicago Belting Co.	—
E. E. Child Co.	—
Cocker Machine & Foundry Co.	—
Collins Bros. Machine Co.	—
Commercial Fibre Co. of America	—
Adam Cook's Sons	—
Cooper-Hewitt Electric Co.	—
Corn Products Refining Co.	—
Courtney, Dana S. Co.	23
Crompton & Knowles Loom Works	—
Crump, F. M. & Co.	—
Curran & Barry	36
Curtis & Marble Machine Co.	26
Cutler-Hammer Mfg. Co.	—
—D—	
Dairy Ring Traveler Co.	—
Deering, Milliken & Co., Inc.	36
Denison Mfg. Co.	—
Diamond State Fibre Co.	21
Dixie Mercerizing Co.	25
Dixon Lubricating Saddle Co.	—
Drake Corp.	13
Draper, E. S.	24
Draper Corp.	1
Dronsfield Bros.	—
Duke Power Co.	29
Duplan Silk Corp.	12
DuPont de Nemours, E. I. & Co.	9
—E—	
Eastwood, Benjamin Co.	44
Eaton, Paul B.	34
Eclipse Textile Devices, Inc.	10
Economy Baler Co.	42
Emmons Loom Harness Co.	25
Entwistle, T. C. Co.	—
—F—	
Fabreka Belting Co.	25
Fales & Jenks Machine Co.	—
Farish Co.	24
Fairbanks-Morse & Co.	5
Ferguson Gear Co.	—
Flexible Steele Lacing Company	—
Ford, J. B. Co.	35
Foster Machine Co.	—
Fournier & Lemoline	—
Franklin Process Co.	—
—G—	
Garland Mfg. Co.	25
General Electric Co.	—
Georgia Webbing & Tape Co.	26
Graton & Knight Co.	2
Greist Mfg. Co.	—
—H—	
Hart Products Corp.	—
H. & B. American Machine Co.	20
Hollingsworth, J. D.	28
Howard Bros. Mfg. Co.	33
Howard-Hickory Co.	—
Hunt, Rodney Machine Co.	—
Hyatt Roller Bearing Co.	—
—I—	
International Salt Co. Inc.	32
—J—	
Jacobs, E. H. & Co.	30
—K—	
Kaumagraph Co.	17
Keever Starch Co.	26
Kenilworth Inn	35
—L—	
Ladew, Edward R. Co.	—
Lane, W. T. & Bros.	28
Langley, W. H. & Co.	36
Lawrence, A. C. Leather Co.	—
Lavonia Mfg. Co.	27
Leslie, Evans & Co.	36
Lesser-Goldman Co.	36
Lestershire Spool & Mfg. Co.	—
Lindley Nurseries, Inc.	30
Link-Belt Co.	—
Lowell Shuttle Co.	26
—M—	
Marston, Jno. P. Co.	37
Mathieson Alkali Works	4
Mauney Steel Co.	—
Merrow Machine Co.	38
Moccasin Bushing Co.	—
Moreland Sizing Co.	—
Morse Chain Co.	—
—N—	
National Aniline & Chemical Co.	6
National Ring Traveler Co.	37
Neutrasol Products Corp.	—
Newburger Cotton Co.	23
Newport Chemical Works, Inc.	—
N. Y. & N. J. Lubricant Co.	—
—O—	
Oakite Products, Inc.	—
—P—	
Page Fence & Wire Products Assn.	34
Page-Madden Co.	38
Parker, Walter L. Co.	31
Parks-Cramer Co.	—
Penick & Ford, Ltd.	—
Perkins, B. F. & Son, Inc.	—
Philadelphia Belting Co.	—
Polk, R. L. & Co.	—
Powers Regulator Co.	—
—R—	
Reeves Brothers, Inc.	36
Roessler & Hasslacher Chemical Co.	—
R. I. Warp Stop Equipment Co.	—
Rice Dobby Chain Co.	35
Rogers Fibre Co.	—
Roy, B. S. & Son	28
—S—	
Saco-Lowell Shops	15
Schachner Leather & Belting Co.	—
Scott, Henry L. & Co.	—
Seaboard Ry.	—
Sellers, Wm. & Co.	—
Seydel Chemical Co.	—
Seydel-Woolley Co.	38
Shambow Shuttle Co.	—
Siggers & Siggers	—
Sirrine, J. E. & Co.	11
Slaughter, G. G.	—
Sonneborn, L. Sons	—
Sonoco Products	—
Southern Ry.	—
Southern Spindle & Flyer Co.	—
Southern Textile Banding Mill	—
Spaulding Fibre Co.	—
Spray Painting & Finishing Equipment Sales Co.	—
Stafford Co.	44
Staley, A. E. Mfg. Co.	—
Steel Heddle Mfg. Co.	—
Stein, Hall & Co.	—
Stone, Chas. H.	27
Sydnor Pump & Well Co.	35
—T—	
Terrell Machine Co.	—
Textile Banking Co.	27
Textile Finishing Machinery Co.	—
Textile Mill Supply Co.	43
Thomas Grate Bar Co.	—
Tice, J. T.	—
Timken Roller Bearing Co.	—
Tolhurst Machine Works	—
Tripod Paint Co.	—
—U—	
United Chemical Products Co.	42
U. S. Bobbin & Shuttle Co.	—
U. S. Ring Traveler Co.	32
—V—	
Universal Winding Co.	32
Victor Ring Traveler Co.	24
Fred'k Victor & Achelis	24
Vogel, Joseph A. Co.	43
—W—	
Washburn	—
Watts, Ridley & Co.	—
Wellington, Sears & Co.	36
Westinghouse Electric & Mfg. Co.	—
White, Fred H.	3
Whitlin Machine Works	—
Whitinsville Spinning Ring Co.	34
Williams, J. H. Co.	—
Wilts Veneer Co.	34
Wolf, Jacques & Co.	—
Woods, T. B. Sons Co.	—
Woodward, Baldwin & Co.	36

Make an Investment in Appearance

*Cheerful Grounds make Cheerful Workers*

**LINDLEY NURSERIES, Inc.**

Pomona, N. C.

*Nurserymen—Landscape Architects*

## Spinning Tests of Cotton Show Valuable Facts

Growers of cotton, cotton dealers, and manufacturers of cotton goods will be especially interested in the results of a series of spinning tests of cotton of various grades just published by the Department of Agriculture.

These tests were conducted by the Division of Cotton Marketing of the Bureau of Agricultural Economics in co-operation with Clemson Agricultural College, under the immediate supervision of H. H. Willis, cotton technologist. Cottons selected to equal respectively the standards for the nine white grades were run under the same mechanical conditions and with atmospheric humidity as nearly fixed as possible. Measurements were taken of the waste content and working qualities of each grade and of the strength and regularity of the gray yarns. By means of a photometer, the varying degrees of brightness were also recorded. The tests were then carried further to determine the influence of grade upon finishing properties. A part of the yarn made from cotton of each grade was bleached, one portion being given a single bleach, a second portion receiving a double bleach and a third portion being dyed on a single bleach base. The effect of each of these processes upon the strength and brightness of the yarns made from cottons of the different grades was noted. Cotton of each grade was also spun in 28s filling yarn and woven into a five-harness filling effect sateen, using a high grade 40s two-ply untreated warp yarn. Portions of this cloth were bleached; portions were bleached and mercerized, and other portions were bleached, mercerized and dyed by different finishing plants. The cloth subjected to these different processes was also tested for strength and brightness and the influence of the grade thus measured.

It was found that the quantity of waste per 500-pound bale ranged approximately from 26 pounds to 69 pounds, or from about 5½ to 14½ per cent.

Though the strength of the yarn did not always follow the grade of the cotton, there was an obvious tendency for the lower grades to produce weaker yarns and for the higher grades to produce stronger yarns. The bleached yarns were found to be weaker than the corresponding gray yarns, while the mercerized yarns were stronger.

The tests indicate that the irregularity of the sizings of the stock in process and of the strength and sizings of the yarns is independent of the grade of the cotton.

The study of finishing properties brought out the fact that the low grades do not bleach as satisfactorily as the higher grades and that the dyeing of the low-grade yarns produces less bright colors.

A formula has been developed and is presented for use in computing the relative spinning value of one grade of cotton as compared with another. This formula is based on estimated average conditions and,

though not to be interpreted as a system of cost accounting, is so constructed as to permit the use of values obtained by the usual cost accounting methods.

The bulletin issued to set forth the results of these tests presents several tables and charts together with a detailed account of the tests conducted and a clear-cut analysis of the formula. By its use, as described, the practical differences between the grades under consideration may be determined.

Copies of the publication, entitled Department Bulletin No. 1488, "Manufacturing Tests of Cotton of the White Grades of the Universal Standards for American Cotton," may be obtained by writing the Department of Agriculture, Washington, D. C.

## N. C. Textile School Graduates

Recent activities of graduates of the Textile School of N. C. State College are reported as follows:

T. R. Johnson, who read a paper at the meeting of the American Chemical Society, Division of Dye Chemistry, on the subject of "Application of Vat Dyes in Package Type Machines," is a graduate in Textile Chemistry and Dyeing and is textile chemist at the Southern Franklin Process Company, Greenville, S. C.

W. C. Dodson, who has been sales engineer for H. G. Mayer Textile Machinery Company, Charlotte, N. C., has been appointed Southern representative of Smith, Drum & Co., Philadelphia, with headquarters in Charlotte. Mr. Dodson is a graduate of the Textile School and is a recognized authority on dyeing and dyeing equipment. He is the author of "Remedies for Dye House Troubles," a practical treatise on dyeing operation and dyestuffs.

C. W. Gunter, class of 1923 in Textile Manufacturing, has been appointed superintendent of bleachery at Mooresville Cotton Mills, Mooresville. He was formerly with the North Carolina Finishing Company, Salisbury, N. C.

Walter C. Taylor, class of 1913 in Textile Manufacturing, has become sales agent for G. Robinson and A. J. Pfeiffer, with headquarters at Charlotte, N. C. The former concern imports French viscose yarns, and A. J. Pfeiffer handles thrown silk and combination yarns. Mr. Taylor formerly was with the Charlotte office of the Duplan Silk Corporation.

W. M. Moore.

Spartanburg, S. C. — William M. Moore, 66, former manager of the Whitney Manufacturing Company and one of the best known textile men of the State, died at his home here after a long illness.

Mr. Moore was a native of Morganton, N. C., and received his education there. He engaged in business in Morganton for a few years and later moved to Columbia, where he was engaged in the mercantile business. He moved to Spartanburg from Columbia and became connected with the Whitney Manufacturing Company.

## — DEPENDENCE —

Profits in most manufacturing plants depend on the steady operation of production units.

LEATHER BELTING is the most economical medium of power transmission, and directly contributes to profit account.

"AKRON" Leather Belting comprises all the various types required in industry. Its super-strength, combined with flexibility and pulley gripping surface, insures maximum machine speeds at lowest transmission cost.

Proper belt application is an engineering problem of vital importance, because it bears on production.

"AKRON"—"CASCADE" and "SPIN TWIST" brands have demonstrated practical economy in Textile Mills!

*Your orders are solicited  
Our guarantee protects your purchase  
We Ship Quick!*

## The Akron Belting Company

Akron, Ohio

Direct Sales Representatives:

L. L. HASKINS  
P. O. Box No. 241  
Greenville, S. C.

M. H. WHATLEY  
111-11th Street  
Opelika, Ala.



Every kind of Bobbin or Spool for  
Every Textile Purpose

### Bobbins

Warp  
Filling  
Automatic Loom  
Winder  
Woolen  
Worsted  
Silk  
Jute  
Rayon  
Card Room



### Spools

Wooden Head  
With or without  
Reinforcement  
Vulcanized Fibre  
Rolls of every  
Description



### Skewers.

Made by

**WALTER L. PARKER CO.**

Lowell, Massachusetts



Because we have our own enameling plant we are able to finish both plain and colors promptly



## Ring Traveler Specialists U. S. Ring Traveler Co.

159 Aborn Street, PROVIDENCE, R. I.

ANTONIO SPENCER, President      AMOS M. BOWEN, Treasurer  
WM. P. VAUGHAN, Southern Representative  
P. O. Box 792      GREENVILLE, S. C.

U. S. Ring Travelers are uniformly tempered which insures even-running spinning. They are also correct as to weight and circles. Quality guaranteed.

### The Fine Points of Carding

(Continued from Page 12)

the very important matter of setting of the different parts. I believe all flats should be set the same at every setting point and set as close as possible without facing them. That is, if we set to a No. 9 set to a No. 9 at every point. As I said before, what carding a card does is right here. Set doffer to cylinder to No. 7 gauge. Now I assume the laps have been properly treated and does not exceed 12 ounces to the yard. Set the screen as follows: .025 at the front edge, .030 at the center and .011 at the backs. Setting close at the backs will destroy the draft caused by the high speed of the cylinder. The settings of the front knife plate is very important. It should be set according to the length of staple being run. When running a good long clean staple the plate should be set so that the stripper will be the same thickness from one end to the other and held together by fibres here and there. By watching this plate, a good deal of good cotton may be saved. A good setting for this plate is .017 at its lower edge and .032 for the upper edge. This will allow the fibres to free themselves and stand out a little from the cylinder before coming in contact with the flats. The flat stripping comb should be set .008. Set the doffer comb .010 and in cold weather if the web follows the doffer raise the comb a little and set to .008 gauge. When a very heavy lap is used, it is impossible to stop all the sagging of the web and the only remedy is to make a lighter lap. Set the back plate to cylinder .022 at both top and bottom. Set the licker-in to .007 or .010. Set feed plate to .012 or .010. The feed plate has a good deal to do with the breaking strength of the yarn being made. Set the licker-in screen at nose to licker-in  $\frac{1}{4}$ -inch. Set both top and bottom mote knives just as close as possible without rubbing. The writer believes that there is a dual action going on all the time between the cylinder and the top flats. That is the wire points on the cylinder holding the fibres for a certain length of time. Now that is where we get our carding and both should be set close and kept as sharp as possible.

Now we all want to eliminate unnecessary drafts. Here is a good method. Suppose in starting up a card, we wish to produce a card sliver about 55 grains per yard and the lap weighs 11 ounces per yard. The first thing to do it to reduce the 11 ounces to grains. There are 437.5 grains in 1 ounce so we have  $437.5 \times 11$  or 4812.5 grains. Divide the total weight in grains by the weight of the sliver desired. We have 4812.5 divided by 55 which is 87. From this quotient, take out 5 per cent allowed for foreign matter extracted from the cotton so  $87 \times .95$  equals 82.65 draft of card. Now take your book. It will tell you what gear to put on the card for the above draft.

The object of the mote knives is to remove all portions of matter other than cotton, but in order to accomplish this, no air should be allowed to enter the back of the card because mote knives are useless if the card is properly packed so air cannot enter the back. Even the side doors should fit tight.

In order to study how the free ends of the fibre receive a combing action from the flats, it is necessary for one to fix firmly in his mind that the cylinder revolves very rapidly, that the fibres, if left at liberty will tend to be thrown outward. Fix in mind that the extent of this outward position depends upon the distance that the flats are set from the cylinder and that they do not change their position, as theory has it, but remain in the same position while passing under each flat unless injured or held by the wire teeth or the flats.

Now the writer could continue writing about the cotton card, but as the contest only calls for the "fine points of carding". I think I have explained very clearly all of the real combing points and fine points to be discussed when dealing with the carding action. As space is limited, I do not care to fill it with stuff that does no good. I will say in closing that it is the real point I wish to bring out and not what we would like to do but what we all can do if we will only do it.

Heavy Load.

### Number Five

In entering the contest on "Fine Points of Carding" I will assume to begin with that we have an even lap, or as even as possible.

We all know that the feed roll works on a curved part of the feed plate. We also know that the shape of the nose must be varied according to the class of cotton being used. If the bite of the roll is shorter than the cotton being used we know that we are going to make weak yarn. If we have the space too far from the combing point the cotton will be plucked out in bunches.

Therefore I would set my feed plate to .010 or .012, according to weight of the lap.

The knife bars are a very important point. The distance from the bars from the licker-in, the distance from the feed plate to the first bar, the distance between the bars, the distance from the bars to screen and the bevel of the bars must be considered according to the class of work desired. For coarse work I would set the bars so that as little stock as possible would be removed. For fine work I would set the bars to where they would remove as much short stock as possible.

The bevel of the bars should be set as close to the licker-in as you can get them, the heel of bevel should be about  $\frac{1}{4}$ -inch from the teeth of the licker-in. The further the bars are set apart the more short fibres we take out, therefore we must set according to local conditions.



### SALT CRYSTALS

It pays to be discriminating in your purchases of salt.

Place your reliance upon International Salt, refined expressly for industrial use.

"International service" is equally dependable. It recognizes the fact that pure salt, promptly delivered, contributes to better production.

INTERNATIONAL  
SALT COMPANY, Inc.  
475 Fifth Avenue, New York



## UNIVERSAL WINDING CO. BOSTON

### Textile Winding Machinery

#### Southern Offices

Charlotte, N. C.

Frederick Jackson

I. E. Wynne

Factory Office, Providence, R. I.

Atlanta, Ga.

Jesse W. Stribling

Thursday, May 5, 1927.

## SOUTHERN TEXTILE BULLETIN

33

The cylinder casing should be set as high up as you can get it between the cylinder and licker-in without touching either one. I would use .010 gauge at the back and from this point I would draw the screen off so that it will be 3-16 or  $\frac{1}{4}$ -inch from the cylinder at the front of the card, or according to the amount of fly wanted out.

The licker-in casing lip should be set about 3-16-inch from the licker-in, according to the class of cotton being used and the class of goods wanted. In making this setting I would bring the setting closer near the .010 setting of the cylinder casing.

The licker-in should be set to .070 gauge before taking it out to make the above settings. I believe every carder will agree with me that this .070 gauge is used here more than any other setting point on a card.

The back plate should be set to a .017 gauge from the cylinder. The flats should be set as close as possible without rubbing. Some carders hold to the graduated settings, but I do not think we can have any set rule for the flats. The stock, the clothing and other conditions must be considered when making this setting.

The flat stripping brush should be set close enough to keep the strips or cotton cleaned off. Care must be taken and not set too deep or too close. Close setting at this point will cause the flat to fill up with waste, hulls and trash.

In my opinion the top flats should be ground every five weeks to get best results.

The next important setting point is the front plate. This plate should be set to a .017 gauge at the top part of the plate as this governs the amount of strips taken out for best results. This plate should be raised up as high as possible between the cylinder and flats. If it drops down too low we lose a good deal of long fibres which means a bigger overhead cost. I use a .022 gauge between this plate and the cylinder. I think a .070 gauge gives the best results between the cylinder and doffer for medium work with good clothing on both doffer and cylinder. We should be very careful at this setting point not to bend the gauge.

Some carders set the doffer comb to a .070 gauge. I think a .010 gives better results. The traverse of the comb must be set to drop a little below the center if set too high it will not clean the cotton from the doffer. If set too low the web will sag down.

I do not think we can have any set rule for grinding the cylinder and doffer as this depends on the class of cotton, the speed of the card and age of the clothing. A card should be sharp at all times. Loose clothing and loose wire brushes should not be allowed anywhere in a cotton card room.

Care must be given the coiler trumpet. The writer has found some too small and some too large for the sliver being made.

Stripping the card is very important in good carding. I think we get best results by stripping every other card four times daily and I do not think we can be too careful in piecing-up behind the stripper and be sure our sliver has come back to its proper weight before the end is pieced up.

If we strip the whole line of cards at once we get uneven work. I believe it is impossible to lay a lap on a card without making uneven sliver. This being the case I train my men to get out the sliver where the laps are laid.

I do not think we can set any rule for cleaning the card, but believe it should be done before it needs it. This applies to the inside as well as the outside. The writer has seen cards looking nice on the outside and on the inside they were causing all kinds of bad work. The grinder should be instructed to take off all plate covers and screens and give them a good cleaning before he grinds his card. For best results we drop our doors once weekly and clean all chokes, lint and foreign matter from underneath and sides of our cards.

The floor should be kept clean with no dirt or oil on it. I never could find any excuse for allowing comb boxes to sling oil. It can be remedied by careful inspections, and with proper instruction. The oiler should be a careful and competent man like the grinder. He should be furnished with a good grade of oil and then we can get results, and save money.

The card draft has been discussed so much until I have come to the conclusion that it all depends on the conditions.

The production of a card depends on quality of goods required. I do not think a card should be overcrowded under any circumstances. All carders have different opinions on production and speeds of the card. I think we should come to some definite understanding about the two items above.

The waste should be kept down to the minimum at all times. To do this the strips and fly should be weighed often, and a record of same kept on file.

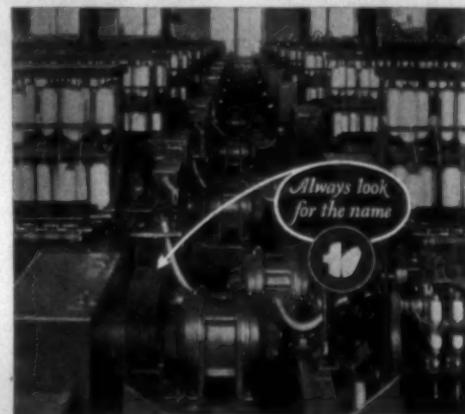
We should keep the card tender properly instructed as to way things should go, and by having them properly trained in loyalty, workmanship and co-operation we should make a good clean even sliver at a minimum cost of labor and overhead.

To accomplish all the fine points on cotton cards we must by all means keep continuously after it day in and day out, making daily inspections of the cost, condition of the room and machinery, not overlooking of quality and quantity.

There should be no reason why our American mills would not prosper if all carders will stay on the alert looking for better ways to do things in the quickest possible time.

C. E. G.

**Clinton  
No. 1  
replaces  
with 84  
Individuals**



Morse Silent Chain Drives from motors to spinning frames, Clinton Mill No. 1

In the interests of more efficient plant operation and greater production, Clinton Mill No. 1 recently replaced group drives with 84 individuals. It is significant to note that all of these are Morse Silent Chain Drives. The bases, too, are designed by Morse. Clinton No. 2

**MORSE CHAIN CO., ITHACA, N. Y., U. S. A.**

Atlanta, Ga.  
Baltimore, Md.  
Birmingham, Ala.  
Buffalo, N. Y.  
Boston, Mass.  
Chicago, Ill.  
Charlotte, N. C.

Cleveland, Ohio  
Denver, Colo.  
Detroit, Mich.  
Louisville, Ky.  
Minneapolis, Minn.  
New Orleans, La.  
New York, N. Y.

Omaha, Neb.  
Philadelphia, Pa.  
Pittsburg, Pa.  
San Francisco, Cal.  
St. Louis, Mo.  
Toronto, 2, Ont., Can.  
Winnipeg, Man., Can.



OST 1154

**Lovely Foundation Plantings  
Turn Houses into Homes**

EVERGREENS or shrubs at the foundation walls are to a house what the frame is to a picture; they give a finished appearance, and turn an ordinary house into a home. Evergreens are peculiarly adapted to foundation plantings; they look cool in summer and warm in winter. The great variety of color, and ever changing foliage, provide constant interest from the time the new growths push out in the spring (like candles on a birthday cake) until the "candles" come again.

Abelias, Mahonias, Ligustrums, and other Broad-leaved Evergreens used close to the house, with a ground cover of Pachysandra, or other evergreen material, impart a feeling of soft, velvety richness.

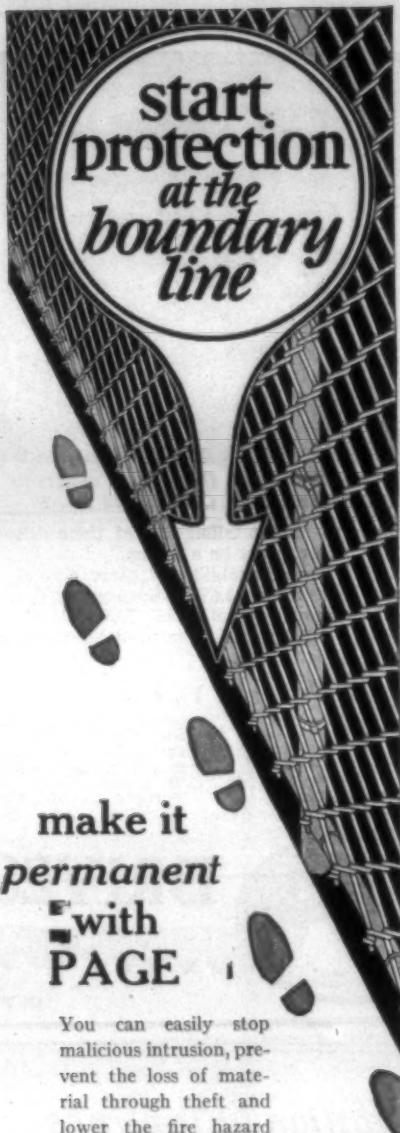
**Howard-Hickory Planting Service**

Write to us saying that you would like our ideas. We will send a representative (perhaps he is in your vicinity now) who will make suggestions and submit a plan with the cost. Upon its acceptance the evergreens, shrubs, or other needed material will be sent as soon as the season permits. Our planting gang will do the work, if you wish, and leave things in good order. A one-year guarantee goes with each job; any plants dying within that time will be replaced free at the nursery.

**The Howard-Hickory Co.**

*Nurserymen—Landscape Gardeners*

**Hickory, North Carolina**



You can easily stop malicious intrusion, prevent the loss of material through theft and lower the fire hazard by enclosing your mill property with Page Chain Link Fence, the permanent and economical form of protection.

Sturdily constructed of copper bearing steel, heavily galvanized after weaving. All fittings, too, zinc coated to resist rust.

Write or phone for a representative. We will submit plans and estimates without obligation.

#### GENERAL EQUIPMENT COMPANY

1411 S. Mint Street P. O. Box 412  
Charlotte, N. C.

## PAGE CHAIN LINK FENCE



America's  
first  
wire fence  
-since 1883



#### Health Authority Praises Pacolet Village

(Continued from Page 7)

lower than that of the state or county.

"From observing the conditions in this cotton mill and its community one cannot help but be moved by the possibilities that can be brought about for these mill workers and it is the earnest hope of the health officials throughout the South that Pacolet may set a standard to which all cotton mills might be raised."

##### Miss Fuller's Work.

Miss Belle Fuller, registered nurse, is largely responsible for the excellent health conditions existing at Pacolet Mills.

She came here ten years ago when disease, as in other communities at the time, was almost unmanageable, but applying herself assiduously to what would have appeared an impossible task—that of improving the community as it has been improved in the last ten years—conditions gradually began to improve.

Miss Fuller could tell an interesting story of the hardships which confronted her at the start of her work in Pacolet. In rainy season the roads were so bad that traveling

from house to house as she did was hard afoot and impractical in a vehicle. She therefore procured a horse on which she made her way through the deep miring roads.

##### Attitude is Changed.

At first, also, the people did not fully realize her purpose in being among them. All were suspicious and some even suggested that she might possibly be a war spy. None of the people could become accustomed to having their children vaccinated or treated by other preventive methods. Now all is different. The profit to be gained from health work is now clearly demonstrated. Now, as Dr. Beachley shows, all have voluntary physical examinations made each year.

The opportunity for social entertainment has shown much growth recently. Ten years ago the only entertainment was to be found at a Y. M. C. A. and a moving picture show. Today a large number of social welfare institutions are found in the community for all members of the family—girls' clubs, boys' programs, school entertainment and mothers' leagues included. Miss Montine Rogers has much to do with the girls' work and for their benefit has recently installed a



## "ATLANTA" HARNESS

"Quality and Service That Satisfies"

ATLANTA HARNESS & REED MFG. CO.

ATLANTA, GA.

P. O. Box 1375

Telephone Main 0517

## PATENTS

Trade-marks, Copyrights  
A former member of the Examining Corps in the United States Patent Office. Convenient for personal interviews.

PAUL B. EATON

Registered Patent Attorney

Offices:

406 Independence Building  
Charlotte, N. C. Telephone 2173  
and

903 Grant Place N. W.  
Washington, D. C.

SPINNING RING SPECIALISTS  
FOR MORE THAN FIFTY YEARS

SPINNING RINGS  
TWISTER RINGS  
SILK RINGS



DIAMOND FINISH  
TRAVELLER CLEANERS  
TRAVELLER CUPS  
GUIDE WIRE SETS

WHITINSVILLE  
SPINNING RING CO.  
WHITINSVILLE, MASS.

Save in freight by using  
**WILTS**  
Veneer Packing Cases

They are lighter and stronger, made of perfect 3-ply Veneer Packing Case Shooks. A saving of 20 to 80 pounds in freight on every shipment because of extreme lightness. Stronger than inch boards, burglarproof, waterproof and clean. Write for prices and samples. Convincing prices—Quick service. Wilts Veneer Co., Richmond, Va.

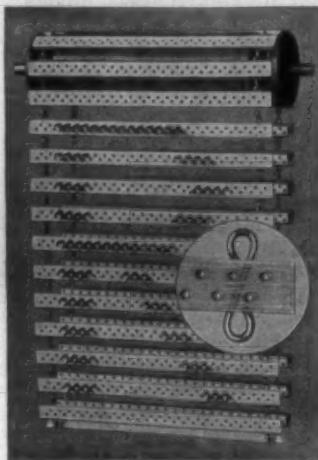
William and York Wilson  
Incorporated

Cotton Brokers

Rock Hill, S. C.

Representing reliable shippers throughout the cotton belt.

## THE IMPROVED EYE



We also Manufacture

**Dobby Loom Cords  
and Pegs**

**Rice Dobby Chain  
Company**

Millbury, Mass.

### WELL DRILLING AND DEEP WELL PUMPS

We do the engineering, and have had 32 years experience solving water problems satisfactorily for textile mills.

SYDNEY PUMP & WELL CO., Inc.  
Richmond, Va.

## Kenilworth Inn

ASHEVILLE, N. C.

Special Weekly Rates

Spend your spring vacation with the wild flowers of the Smoky Mountains.

The famous Kenilworth Inn offers you a special weekly rate for your family—which includes a marvelous program of entertainment.

Listen in on WWNC any evening

### AMERICAN PLAN with meals

Single Room—hot & cold water	\$42.00 UP
Double " " " "	80.00 "
Single " —Private Bath	60.00 "
Double " " " "	90.00 "
Double & Single " " "	126.00 "

Delightful, dignified surroundings

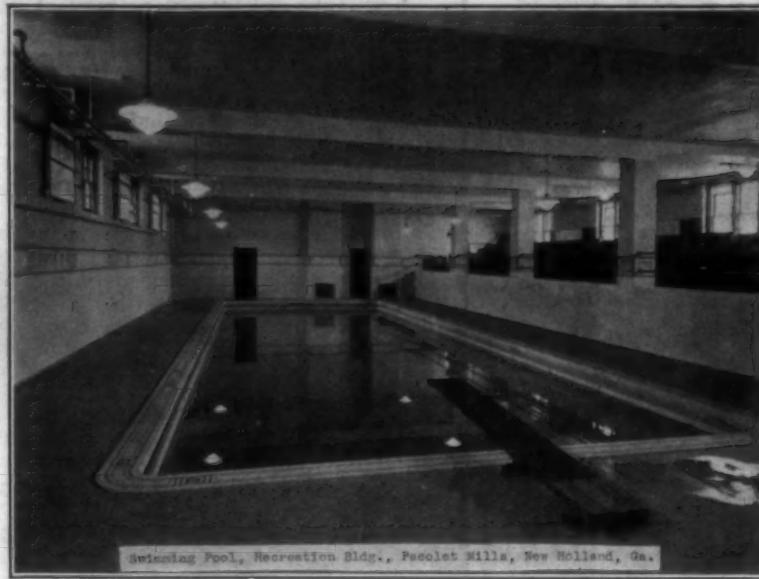
Further information upon request.

**ROScoe A. MARVEL  
MANAGER**

beauty shop where they are taught the value of personal charm through correct methods of caring for the skin, hair, nails and the like. The girls seem interested in making up

their faces without too much stuff, now.

"Education in all lines," Miss Fuller believes, "has come to be the keynote in the community."



Swimming Pool, Recreation Bldg., Pococet Mills, New Holland, Ga.

### Eastern North Carolina Division To Meet

(Continued from Page 10)

9. Would you use compressed air in your spinning room for cleaning? Give reason for answer.

10. Is it good sign to occasionally see roving broke back in your creels, or is it best to have excess twist in the roving?

11. What is the best relative humidity for spinning room on Nos. 7 to 14?

12. Does it pay to use double belts in spinning room, 204 spindles to the frame, No. 4 Draper spindles, 2½ inch rings?

### Honor Memory of Jas. A. Greene.

The following resolutions in memory of James A. Greene, late superintendent of the Lumberton plant of the Mansfield Mills, were adopted by his associates:

"We, the undersigned, who have enjoyed a long and close association with James A. Greene, who departed this life on Friday, the fifteenth day of April, nineteen hundred and twenty-seven, desire to record an expression of high regard, and thankfulness for the privilege of having been associated with such a man.

"We, who worked with him, and under his direction, feel the loss very keenly. He was our counselor and our friend. He always insisted upon every man doing his duty; and while he was firm in this respect, he was always kind and considerate, and never failed to lend a helping hand when perplexities arose with any of us.

"A gentle, kind and helpful spirit has departed from our midst, and we feel very deeply the loss to each of us as individuals, and the loss to the whole town in which we live.

"We extend to his bereaved ones, and especially Mrs. Greene, our heartfelt sympathy, and only wish

that we could do something to show our love for the man who left us."

These resolutions were signed by the following:

Wm. Miller, Ben F. Williams, F. F. Morgan, Willie J. Coleman, A. E. Barber, G. F. Fields, Lee Stallings, R. H. Gibson, W. G. Willoughby, J. W. Pittman, J. H. Fleming, E. L. Strange, Edgar Baxley.

### New England and the Bishops' Attack.

New England, of course, seized upon the letter of the 41 bishops criticising conditions in the cotton mill vicinities of the South as a fit text for spreading some propaganda in regard to the unfavorableness of the South for industrial development. Fortunately, however, nothing that the ministers can say about these conditions and nothing that the New England propagandists can stretch their criticism into meaning will be able to halt the South's irresistible climb to the industrial heights of the Republic.—Charlotte News.

### Set Up Machinery for N. C. Child Labor Law

Raleigh, N. C.—The State Child Welfare Commission has started its machinery for enforcement of the 1927 child labor law.

The commission, in executive session, resolved to enforce the new State law as interpreted by Attorney General Dennis G. Brummitt in an opinion, given E. F. Carter, commission executive officer.

The attorney general gave it as his opinion that a child between the ages of 14 and 16 who has not completed the fourth grade in school may not be employed for more than eight hours in any one day or 48 hours or six days in any one week, or between the hours of 7 p. m. and 6 a. m.

Textile fabrics which have the soft texture, bright color, and superior appearance which result from the use of the

### WYANDOTTE TEXTILE ALKALIES

have superior advantage on a competitive market.

Ask your supply man or write



The J. B. FORD CO., Sole Mfrs.  
Wyandotte, Michigan

### MAKE YOUR WANTS KNOWN

Through The  
Bulletin Want Department  
Read in More than 95% of the  
Southern Textile Mills  
Rate: \$1.50 per inch per insertion

### Becky Ann's Books

Interesting Stories of  
Cotton Mill Life

### "A Man Without a Friend"

"Only a Factory Boy"

"Hearts of Gold"

"The Better Way"

"Will Allen—Sinner"

Price \$1.00 Each

Order from

CLARK PUBLISHING CO.  
Charlotte, N. C.



## Deering, Milliken & Co., Inc.

79-83 Leonard Street  
New York

99 Chauncy St., Boston

223 Jackson Blvd., Chicago

## Leslie, Evans & Company

39-41 Thomas St. New York

Selling Agents for Southern Mills  
Sheetings, Print Cloth, Drills, Twills, Ducks

**W. H. Langley & Co.**  
COMMISSION MERCHANTS

57 Worth St.

Sole Selling Agents For

Langley Mills, Seminole Mills, Aiken Mills, Anderson Cotton Mills,  
Strickland Cotton Mills, Moultrie Cotton Mills, Poulan Cotton Mills,  
Royal Cotton Mills

## WOODWARD, BALDWIN & CO.

Established 1828

43 and 45 Worth Street, New York

Selling Agents for

Southern Cotton Mills

Baltimore  
St. Louis  
St. Paul

Philadelphia  
San Francisco  
Cincinnati

Boston  
Chicago  
Cincinnati

St. Joseph  
Shanghai (China)  
Minneapolis

## Wellington, Sears & Company

93 Franklin St., Boston

66 Worth St., New York

Philadelphia  
Atlanta

Chicago  
New Orleans

St. Louis  
San Francisco

Dallas

## Amory, Browne & Co.

Specializing in Selling Cotton Mill Products

BOSTON, 48 Franklin St.

62 Worth St., NEW YORK

Our Export Department Serves 69 Foreign Countries

## CURRAN & BARRY

320 Broadway

New York, N. Y.

## REEVES BROTHERS, INC.

55 Leonard Street, New York

Philadelphia office: Drexel Building

New England office: Middletown, Conn.

Selling Agents for the following Mills:

Cotton Yarns, Combed Peeler, Carded Singles and Ply, Audrey Spinning Co., Weldon, N. C., Mandeville Mills, Carrollton, Ga., Mills Mill, No. 2, Woodruff, S. C., Wabena Mills, Lexington, N. C., White Hall Yarn Mills, White Hall, Ga., Grey Goods, Print Cloths, Twills, Sheetings, Pajama Checks, Arcadia Mills, Spartanburg, S. C., Clinton Cotton Mills, Clinton, S. C., Hermitage Cotton Mills, Camden, S. C., Mills Mill, Greenville, S. C., Osage Mfg. Co., Bessemer City, N. C.

## Cotton Goods

New York.—Renewed activity in sales of print cloths and convertibles was a feature of the cotton goods markets last week. Business in these goods was active throughout the week, sales being estimated as high as 300,000 pieces of print cloths. Business in convertibles was steady throughout the week and while most orders were small, the total reached large figures. There was also a larger business in bag goods and steady sales of colored goods. Market authorities report that sales of colored goods this year have already exceeded half the sales in 1926. Denims and ginghams are well under order in some cases having been sold into September and colored flannels and fancy domestics are sold through August.

Some of the large sellers, including the Cone Export and Commission Company, have withdrawn denims from the market for July and August, due to having booked as much business as mills can deliver in those months.

Print cloth business within the last week has totaled the largest volume recorded for any similar period since early March. The outstanding feature has been the placing of contracts beyond June, fully the best part of the actual yardage having been through the third quarter of the year, with a fairly substantial sold into the last quarter.

Coarse yarn chambray sold in a fair way through June-July-August. The situation in these fabrics has generally remained firm and steady, with a number of mills well fixed on production, and some users have felt encouraged to cover part of their requirements for early fall.

At Fall River, trading in the print cloth market was more restricted, with the majority of wide and narrow print constructions quiet. Despite the fact that the cotton market showed strength, buyers sought concessions. Prices remain practically unchanged, although a slight easing tendency is noted as the week draws to a close. The sales are estimated at 65,000 pieces.

Only a few styles in narrow goods showed life, 25-inch, 40x32, 14.75, being reported at 2%, and 31½-inch, 48 squares, 7.15, at 4%, in fair quantities. The balance of the narrow goods, except for small orders now and then, was quiet.

Cotton goods prices were as follows:

Print cloths, 28-in., 64x64s	5½
Print cloths, 28-in., 64x60s	5
Print cloths, 27-in., 64x60s	4½
Gray goods, 38½-in., 64x64s	7½
Gray goods, 39-in., 68x72s	8
Gray goods, 39-in., 80x80s	10
Brown sheetings, 3-yard	10
Brown sh'tgs, 4-yd., 56x60	8½
Brown sheetings, stand	11
Tickings, 8-oz.	18 a19½
Denims	14½
Staple ginghams, 27-in.	9
Kid finished cambries	8½ a 9
Dress ginghams	12½ a 16½
Standard prints	8

While most of the constructions in sheetings sold in a small scattered way there were also several carload lots disposed of. Among these were quantity of 37-inch 4-yard at 7% with bids of 7½% turned down. The 3-inch 5-yard sold well at 5% for later and 6c for spots and a few did well on 36-inch 5-yard at 6½% for later. There are fewer 36-inch 5.50-yard quick around at 5%, yet enough was found to satisfy requirements. Sales of 36-inch 3-yard were

We find our cotton mills have big stocks of cotton on hand. Most of the mill yards they have cotton piled high and not warehoused. The mills are running fine and on full time.—Kannapolis Star.

## Southeastern Selling Agency LESSER-GOLDMAN COTTON COMPANY

OF ST. LOUIS, MO.

P. H. PARTRIDGE, Agent, Charlotte, N. C.

Extra staples, and good 1 1-16 and 1 1/2 cotton from Arkansas, Oklahoma, and Texas, and Memphis territory.

# The Yarn Market

Philadelphia, Pa.—There was no material change in the yarn market during the week. Prices remained virtually unchanged, with spinners refusing to meet the lower quotations named by some of the dealers in this market. Spinners prices were even firmer at the end of the week, with indications that the flood in Mississippi will put cotton prices higher.

Actual business reported was small. Consumers of yarn continued to mark time and showed no desire to buy in a large way. A slightly larger inquiry was evident on Friday and Saturday, but there was no corresponding increase in orders. Most yarn consumers are expecting lower cotton prices and are unwilling to buy more yarn now than is needed to meet their immediate needs.

The small business done showed that carded knitting yarns were in slightly better demand than weaving yarns. There was a small amount of business from insulators, the carpet and upholstery trades, with individual orders calling for very small lots.

Reports here indicate that most Southern spinners on carded yarns are running on orders and will not have to have new business for several weeks. In the meantime they are refusing buyers efforts to purchase at lower figures.

The combed yarn situation is reported as being fairly satisfactory. A moderate volume of new business was reported during the week and most mills have sufficient orders for several weeks to come.

The price list in this market, which reflects concessions granted by dealers, is lower than spinners quotations.

#### Southern Two-ply Warps.

8s	25
10s	25 1/2
12s	26 1/2
14s	28
16s	29
20s	32
24s	33
26s	33
30s	36
40s ex.	45
40s	49

#### Southern Two-ply Skeins.

8s	25
10s	25 1/2
12s	26
14s	27
16s	28
20s	29
24s	32
26s	33
30s	36
40s	45
40s ex.	49
50s	51

#### Tinged Carpet 3 and 4-ply

#### White Carpet 3 and 4-ply

#### Southern Single Chain W.

10s	25
12s	26
14s	27
16s	28
20s	29
24s	32
26s	33
30s	36
36s	42
40s	45
40s ex.	49
50s	51

24s	31 1/2
26s	32
30s	36
40s	46

#### Southern Single Skeins.

8s	24 1/2
10s	25
12s	26
14s	27
16s	28
18s	29 1/2
20s	29
22s	31
24s	32
26s	33
30s	35 1/2

#### Southern Frame Cones.

8s	24 1/2
10s	25
12s	26
14s	27
16s	28
18s	29
20s	29 1/2
22s	29
24s	30
26s	31
30s	31
36s*	31 1/2
40s	43

#### Southern Combed Peeler Skeins, Etc.—

Two-ply.	
16s	40
20s	41
30s	49
36s	50
40s	53
50s	59
60s	67
70s	79
80s	89

#### Southern Combed Peeler Cones.

10s	34 1/2
12s	35
14s	36
16s	37
18s	38
20s	39
22s	40 1/2
24s	42
26s	43
28s	44
30s	46
32s	46
24s	48
26s	49
28s	52
40s	54
50s	61
60s	66

#### Southern Spinners' Bulletin

The weekly bulletin of the Southern Yarn Spinners' Association.

The yarn market remains in with trading confined to for prompt shipment. small stocks in hands at mills, buyers are place orders in believed that s' carpet trade industry is for the

The ley r'.

**CATLIN & COMPANY**  
NEW YORK BOSTON PHILADELPHIA CHICAGO

Commission Merchants

Cotton Cloth and Cotton Yarn

SOUTHERN OFFICE:

910-11 Commercial Bank Bldg. CHARLOTTE, N. C.

## WENTWORTH Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear, Preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE. Manufactured only by the

National Ring Traveler Co.

Providence, R. I.  
31 W. First Street, Charlotte, N. C.



## COLORED COTTON YARNS

4s to 20s single and ply, hosiery and warp twist, direct and sulphur colors in blends, solid colors, heather mixtures, black and white twists, etc.

OF THE HIGHEST QUALITY

manufactured by

**Lavonia Manufacturing Co.**  
LAVONIA, GEORGIA

7 definite reasons why you should use

## Tragasil

1.

ble.

loom

th.

ny

on

## Want Department

Would like to communicate with salesman now calling on the Textile Mills in Ga., Ala. and Miss. to handle our leather belting and loop picker account. Attractive proposition. Commission basis. Address P. O. Box 353, Greenville, S. C.

### Two Salesmen Wanted

Well established, reputable house manufacturing numerous dye-stuffs, oils, softeners, sizing and finishing materials, desires to increase its sales force in Southern territory. Applicants must state experience and full qualifications. Excellent opportunity for the right men. Write "Chemicals," care Southern Textile Bulletin.

### AN OPENING AT ONCE

For the right man, who can take charge of a small Yarn Mill and who can superintendent operating the machinery, selling its product, buying the cotton and arrange its finances. Apply to Andrew S. Webb, 25th and Reed Streets, Philadelphia, Pa., or J. H. Morgan, Greenville, S. C.

### Position Wanted

By boss weaver or second hand. Has had over 20 years' experience in cotton work. Apply or phone to R. T. Grant, United Chemical Products Co., Commercial Bldg., Charlotte, N. C.

### Help Wanted

We have opening for Dobby Draper loom fixer. Give references and experience in first letter. Apply "Dobby," care Southern Textile Bulletin.

### Wanted

Assistant in starch room in cotton piece goods finishing plant; plain finishes; Middle Western City. Must furnish good references. Excellent opportunity. Write W. W. T., care Southern Textile Bulletin.

### Wanted

Two Draper loom fixers. \$24.40 a week. 80 looms to the section. All white work. Apply Box 45, Avondale, Ala.

### Wanted

Immediately, 700 used Roving Cans, 17"x36". Must be in good condition. Address Monticello Cotton Mills, Monticello, Ark.

### SECOND-HAND MACHINERY Spinning

Gauge 2½ Draper heavy spindles, Whitin base. Travis 6" thread board wood, band driven, combination builders. Double roving creel. 21 Fales & Jenks, 240 spindles. 5 Fales & Jenks, 216 spindles. 6 Saco-Pettee, 240 spindles. 2 Saco-Pettee, 256 spindles.

### Intermediates

8 9x4½ Providence, not balancing rail. No. 1—92 spindles. No. 2—100 spindles. No. 3—80 spindles. No. 4—80 spindles. No. 5—100 spindles. No. 6—96 spindles. No. 7—96 spindles. No. 8—108 spindles.

All supplies for Atherton pickers such as screen, calender roll, gears, arms, etc.

The spinning and intermediates can be examined at our mill now while they are running. If interested the above can be bought at a bargain.

Industrial Cotton Mills Company, Inc.  
Rock Hill, S. C.

**Men Wanted for Southern Mills**  
Superintendent large hosiery mill making seamless and full fashioned cotton and silk hosiery; overseers carding, spinning and weaving on tire cord fabrics; boss finisher woolen goods; hosiery knitting machine fixers; sewing machine fixer experienced underwear mills. Charles P. Raymond Textile Service, 294 Washington St., Boston. Confidential Employment Service for employers seeking men and men seeking positions.

### Wanted

Assistant overseer, about thirty years of age, in calendering and folding room of cotton piece goods finishing plant; plain finishes; Middle Western city. Must be ambitious and furnish good references. Write "Calender," care Southern Textile Bulletin.

**MERROW**  
HIGH SPEED TRIMMING AND OVERSEAMING MACHINES  
ASK ABOUT OUR NEW-STYLE GO-AROUND MACHINE  
THE MERROW MACHINE COMPANY  
20 LAUREL STREET, HARTFORD, CONN., U. S. A.

## THE SUPERIOR PORCELAIN

for

## Textile Machinery

manufactured by

**Page-Madden Co.**

Incorporated

277 Ralph Ave.,  
Brooklyn, N. Y.

Samples and Catalog upon Request

**MANUFACTURED WEATHER  
makes  
Every day a good day**  
Humidification Dehumidification  
Heating Ventilation Purification  
Dry 475  
**Carrier**  
Engineering Corporation  
750 Frelinghuysen Ave. Newark, N. J.  
Boston • Buffalo • Chicago • New York • Philadelphia

**ACME**  
SALES COMPANY  
CARDED-COMBED-MERCERIZED  
**COTTON YARNS**  
ALL COUNTS AND DESCRIPTIONS FOR THE  
KNITTING-WEAVING-CONVERTING TRADE  
REPRESENTING  
THE MERCHANDISING CO.  
LUSTRE LACE  
CONTROLLED MANUFACTURE  
IN NORTH CAROLINA

## Seydel-Woolley Co.

Textile Chemicals  
for Best Weaving

### Seyco Products

The result of twenty years' study and practice in treatment of Sizing and finishing problems.

Main Office and Plant, 864 Glenn St., S. W., Atlanta, Ga.

## EMPLOYMENT BUREAU

The fee for joining our employment bureau for three months is \$2.00 which will also cover the cost of carrying a small advertisement for two weeks.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only \$1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires and carry small advertisements for two weeks.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern Textile Industry.

WANT position as overseer carding. Would prefer job where card room is in very bad condition. 28 years old, married and have family. A-1 references as to character and ability. No. 5120.

WANT position as overseer weaving. Experienced and can furnish the best of references. No. 5121.

WANT position as master mechanic. 25 years experience in cotton mill shops. Can handle steam, water and electric drives and welding. Can give good references. No. 5122.

WANT position as overseer of spinning, or second-hand in large mill. 15 years experience in mill and 8 years as second-hand and overseer. Can give good references. No. 5123.

WANT position as overseer carding and spinning, or of carding. Long experience. Good references. No. 5124.

WANT position as overseer of card room in small mill, or second-hand in large mill. Good references. No. 5125.

WANT position as overseer spinning. 7 years experience as overseer of spinning; good experience in carding. I. C. S. graduate. Can change on short notice. No. 5126.

WANT position as overseer carding and spinning, or carding or spinning. Experienced. Can furnish good references. No. 5127.

WANT position as superintendent of cotton, carding, spinning and weaving. Have both practical and technical knowledge of cotton manufacturing. Now in charge of carding and spinning, and wish to change only for a better position. Can furnish good references as to character and qualifications. No. 5128.

WANT position as chief engineer or master mechanic. Several years experience on both steam and electric power. Can handle machine shop in first class manner. Best of references. No. 5129.

WANT position as overseer spinning, or carding and spinning or superintendent of yarn mill. Experienced. Can furnish good references. No. 5130.

WANT position as overseer of weaving. No record, but ability to make one. Now employed as second hand. 32 years of age, married and have family. References as to character. No. 5131.

WANT position as overseer spinning, or large second hand job. Now running spinning at night but want day job. Can furnish good references. No. 5132.

WANT position as superintendent of yarn mill or plain weave mill. Would prefer a mill that is run down and needs bringing up. Good references. No. 5133.

WANT position as overseer carding, spinning, spooling, winding, warping and twisting. I. C. S. graduate. 18 years experience as overseer and assistant superintendent. 38 years of age. Best of references. No. 5134.

WANT position as overseer carding, or would accept carding and spinning at night. Overseer for 13 years. Experienced on combers and double carding. Can furnish good references. No. 5135.

WANT position as master mechanic. 12 years experience in steam, water and electric power, shop work, welding and ice making. Married. 35 years of age. Good references. No. 5136.

WANT position as superintendent, carder, or spinner, or overseer of carding and spinning. Best of references. No. 5137.

WANT position as superintendent of small or medium yarn mill, or as overseer carding and spinning in large mill. Ten years experience as overseer carding and spinning on all kinds of colored novelties and weaving yarn, also knitting yarns. Want place that pays at least \$36.00 per week. 31 years of age, married and have family. Can furnish good references as to my experience and ability. No. 5138.

WANT position as weave room overseer; either plain or fancy weave room. Several years experience on plain and fancy weaves, leno box weaves, and silk filled weaves. No. 5139.

WANT position as overseer of carding or spinning, or both carding and spinning. Now employed but wish to make a change. Can give the best of references. No. 5140.

WANT position as master mechanic. 12 years experience in cotton mill shops; 6 years in contract shop. Reasonable salary. No. 5141.

WANT position as superintendent. Could change on thirty days notice. Good references. No. 5142.

WANT position as roller coverer. 12 years experience. 27 years of age, single and strictly sober. Can take charge as foreman. A-1 references. No. 5143.

WANT position as overseer weaving, slashing, spooling and warping in some mill east of Mississippi River. Can run any job on Draper looms, 2-3-4-5-6 harness goods. Strictly sober. I. C. S. student and hustler for production and low seconds. Good references. No. 5144.

WANT position as superintendent of yarn mill. Have had long experience in carding and spinning and am confident can run a mill and make money. Have a good textile education and have made a successful overseer. Reliable and strictly sober. No. 5145.

WANT position as roller coverer and belt man. 22 years experience. 34 years of age, married, strictly sober and reliable. Can furnish good references and can change at once. No. 5146.

WANT position as superintendent of either yarn or weave mill. Would consider position as overseer of weaving in large mill. Good references. No. 5147.

WANT position as overseer of weaving, plain or fancy; overseer of spinning, medium numbers; or overseer of carding, medium numbers, white. Good references. No. 5148.

WANT position as overseer of weaving, or clothroom. 20 years practical experience. Graduate of I. C. S. 35 years of age and married. Now employed as overseer, but desire better position. Good references. No. 5149.

WANT position as overseer of weaving. 5 years experience and can furnish the best of references. No. 5150.

WANT position as superintendent. Experience not confined to any one or two departments, as is usually the case, but prior to promotion to superintendent's position, was successfully and successively overseer of carding, and of spinning and weaving. Good references. No. 5151.

WANT position as master mechanic. Can handle steam or electric plant. 42 years of age and have family. Good references. No. 5152.

WANT position as cotton grader. Can furnish good references. No. 5153.

WANT position as overseer of carding, day or night jobs, at \$30.00 or more per week. 34 years of age. 10 years experience in carding, and can guarantee quality and quantity. No. 5154.

## MORE SOUTHERN SPINNERS

are using

### "AMTEX"

#### Spinning, Twisting and Spooler Tapes

Than ever before

This increasing demand indicates the superiority of AMTEX Tapes over all others.

We are pleased to build special Tapes for your particular needs.

Send us your specifications and we will guarantee satisfaction.

Manufactured by

**AMERICAN TEXTILE BANDING CO., INC.**

GERMANTOWN, PHILADELPHIA, PA.

Sold in the South by

**Charlotte Supply Co., Charlotte, N. C.**

William H. Hayward Edward M. Johnson Joseph A. Bryant  
President Vice President & Treas. Vice President

ESTABLISHED 1815

## Arnold, Hoffman & Co.

INCORPORATED

NEW YORK, N. Y. PROVIDENCE, R. I. BOSTON, MASS.  
PHILADELPHIA, PA. CHARLOTTE, N. C.

Importers and Manufacturers of

**Starches, Gums, Dextrine  
Alizarine Assistant, Soluble  
Oil, Soap**

And Every Known Material from every part of the world  
for Starching, Softening, Weighting, and Finishing  
Yarn, Thread or any Fabric

Special attention given by practical men to specialties for Sizing, Softening, Finishing and Weighting Cotton, Woolen and Worsted Fabrics; combining the latest European and American methods.

**Sole Agents For  
BELLE ALKALI CO., of Belle, W. Va.  
Manufacturers of  
Liquid Chlorine, Bleaching Powder, Caustic Soda  
Solid or Flaked**

## CLASSIFIED LIST OF ADVERTISERS

**Air Conditioners—**  
American Moistening Co.  
The Bahson Co.  
Carrier Engineering Co.  
Parks-Cramer Co.  
R. I. Humidifier and Ventilating Co.

**Albion—**  
The Roessler & Hasslacher Chemical Co.

**Architects and Mill Engineers—**  
Sirrine & Co., J. E.

**Ash Handling Equipment—**  
Link-Belt Co.

**Automatic Feeds for Cotton—**  
Saco-Lowell Shops  
Whitin Machine Works.

**Automatic Spoolers—**  
Barber-Colman Co.  
T. C. Entwistle Co.

**Automatic Stop Motion—**  
Eclipse Textile Devices Co., Inc.

**Automatic Yarn Cleaner—**  
Eclipse Textile Devices, Inc.

**Ball Bearing—**  
Charles Bond Company

**Balers—**  
Dunning & Boschart Press Co., Inc.  
Economy Baler Co.

**Baling Presses—**  
Dunning & Boschart Press Co., Inc.  
Economy Baler Co.

**Bands and Tape—**  
American Textile Banding Co.

**Baskets—**  
Charles Bond Company  
Diamond State Fibre Company  
W. T. Lane & Bros.  
Wickwire Spencer Steel Co.

**Beaming and Warping Machinery—**  
Barber-Colman Co.  
Cocker Machinery & Foundry Co.  
Draper Corporation.  
Easton & Burnham Machine Co.  
T. C. Entwistle Co.  
Saco-Lowell Shops

**Beam Heads—**  
T. C. Entwistle Co.  
Saco-Lowell Shops

**Beams (Section)—**  
Washburn

**Beams (All Steel)—**  
T. C. Entwistle Co.  
Saco-Lowell Shops

**Beaming Combs—**  
T. C. Entwistle Co.  
Easton & Burnham Machine Co.  
Steel Heddle Mfg. Co.

**Bearings (Roller)—**  
Charles Bond Company

**Bearings (Shaft)—**  
Charles Bond Company  
William Sellers & Co., Inc.

**Bearings (Textile Machinery)—**  
Charles Bond Company

**Belt Conveyors—**  
Link-Belt Co.  
Wickwire Spencer Steel Co.

**Belt Conveyors (Spiral and Woven)—**  
Wickwire Spencer Steel Co.

**Belt Fasteners—**  
Flexible Steel Lacing Co.

**Belt Tighteners—**  
Charles Bond Company  
Link-Belt Co.

**Belting—**  
The Akron Belting Co.  
Charles Bond Company  
Charlotte Leather Belting Co.  
Chicago Belting Co.  
Graton & Knight Co.  
Edward R. Ladew Co.  
Fabreka Belting Co.  
Philadelphia Belting Co.  
Schachner Leather & Belting Co.

**Belt Cement—**  
Charles Bond Company  
Graton & Knight Co.  
Edward R. Ladew Co.

**Belt Dressing—**  
Charles Bond Company  
Graton & Knight Co.

**Belt Lacing—**  
Charles Bond Company  
Chicago Belting Co.  
Graton & Knight Co.  
Edward R. Ladew Co.

**Belting (Link)—**  
Charles Bond Company  
Link-Belt Co.  
Morse Chain Co.

**Bicarbonate of Soda—**  
Mathieson Alkali Works, Inc.

**Blancheries—**  
Joseph Bancroft & Sons Co.

**Blanching Chemicals**

The Roessler & Hasslacher Chemical Co.

**Blanching Materials—**  
Arabol Mfg. Co.  
Arnold, Hoffman & Co., Inc.  
Borne, Scrymser Co.  
Bosson & Lane  
J. B. Ford Co.  
United Chemical Products Corp.  
Seydel Chemical Company  
L. Sonneborn Sons, Inc.  
United Chemical Products Co.  
Wolf, Jacques & Co.

**Bobbins and Spools—**  
American Bobbins Co.  
David Brown Co.  
Courtney, Dana S. Co.  
Draper Corporation  
Lestershire Spool & Mfg. Co.  
Lowell Shuttle Co.  
Walter L. Parker Co.  
Steel Heddle Mfg. Co.

**Boxes—**  
Diamond State Fibre Company  
Wilts Veneer Co.

**Box Shooks—**  
Wilts Veneer Co.

**Blowers and Blower Systems—**  
Carrier Engineering Co.  
Parks-Cramer Co.

**Breton Minerel—**  
Borne, Scrymser Co.

**Brushes—**  
Atlanta Brush Co.  
Curtis & Marble Machine Co.

**Brushing Machine—**  
Curtis & Marble Machine Co.

**Bobbin Stripper—**  
Terrell Machine Co.

**Brooms—**  
Pioneer Broom Co.

**Bushings (Bronze)—**  
Moccasin Bushing Co.

**Calenders—**  
H. W. Butterworth & Sons Co.  
B. F. Perkins & Son, Inc.  
Textile Finishing Machinery Co.

**Calender Roll Grinders—**  
B. S. Roy & Son Co.

**Cards—**  
Saco-Lowell Shops  
Whitin Machine Works  
Woonsocket Machine & Press Co., Inc.

**Card Clothing—**  
Ashworth Bros.  
Charlotte Mfg. Co.  
Howard Bros. Mfg. Co.  
Wickwire Spencer Steel Co.

**Card Grinding Machinery—**  
Dronsfield Bros.  
Easton & Burnham Machine Co.  
T. C. Entwistle Co.  
Roy, B. S. & Son Co.  
Saco-Lowell Shops  
Whitin Machine Works  
Woonsocket Machine & Press Co., Inc.

**Card Stripper—**  
Abington Textile Machinery Works

**Carrier Aprons—**  
Link-Belt Co.

**Castings (Brass and Bronze)—**  
Moccasin Bushing Co.

**Caustic Soda—**  
Arnold, Hoffman & Co., Inc.  
Mathieson Alkali Works, Inc.

**Chain Belts and Drives—**  
Charles Bond Company  
Link-Belt Co.  
Morse Chain Co.  
The Whitney Manufacturing Co.

**Chemicals—**  
J. B. Ford Co.  
Hart Products Corp.  
Mathieson Alkali Works, Inc.  
Seydel Chemical Co.  
Seydel-Woolley Co.  
L. Sonneborn Sons, Inc.  
United Chemical Products Corporation.  
Jacques Wolf & Co.

**Cleaning Agents—**  
The Arabol Manufacturing Co.  
Oakite Products, Inc.  
Jacques Wolf & Co.

**Cloth Presses—**  
Economy Baler Co.

**Clutches (Friction)—**  
Charles Bond Company  
Textile Finishing Machinery Co.

**Cloth Winders and Doublers—**  
Curtis & Marble Machine Co.

**Coal Handling Machinery—**  
Link-Belt Co.

**Combs—**  
Steel Heddle Mfg. Co.

**Combs (Beamers, Warpers, Slashers)—**  
Easton & Burnham Machine Co.  
T. C. Entwistle Co.

**Commission Merchants—**  
Catlin & Co.  
The Farish Co.  
J. H. Lane & Co.  
Mauney Steel Co.  
Ridley, Watts & Co.

**Compressors (Air)—**  
Allis-Chalmers Mfg. Co.

**Condensers—**  
Allis-Chalmers Mfg. Co.

**Conditioning Machines—**  
American Moistening Co.

**Cones (Paper)—**  
Sonoco Products Co.

**Cone Vice Couplings—**  
William Sellers & Co., Inc.

**Controllers, Electric—**  
Cutler-Hammer Mfg. Co.

**Conveying Systems—**  
Link-Belt Co.

**Coolers (Air)—**  
—See Humidifying Apparatus.

**Cotton—**  
Lesser-Goldman Cotton Co.  
Newburger Cotton Co.  
Wm. & York Wilson.

**Cotton Machinery—**  
Ashworth Bros.  
Barber-Colman Co.  
Collins Bros. Machine Co.  
Crompton & Knowles Loom Works  
Dixon Lubricating Saddle Co.  
Draper Corporation  
T. C. Entwistle Co.  
Fales & Jenks Machine Co.  
Foster Machine Co.  
H. & B. American Machine Co.  
Rodney Hunt Machine Co.  
National Ring Traveler Co.  
Roy, B. S. & Son  
Saco-Lowell Shops  
Southern Spindle & Flyer Co.  
Stafford Co., The  
Terrell Machine Co.  
Tolhurst Machine Works  
Universal Winding Co.  
Whitin Machine Works  
Whitinsville Spinning Ring Co.  
Woonsocket Machine & Press Co., Inc.

**Cotton Openers and Lappers—**  
Saco-Lowell Shops  
Whitin Machine Works  
Woonsocket Machine & Press Co., Inc.

**Cotton Softeners—**  
Arabol Mfg. Co.  
Arnold, Hoffman & Co., Inc.  
Borne, Scrymser Co.  
Bosson & Lane  
Hart Products Corp.  
Seydel Chemical Co.  
Seydel-Woolley Co.  
L. Sonneborn Sons, Inc.  
United Chemical Products Corporation.  
Wolf, Jacques & Co.

**Cotton Waste Machinery—**  
Saco-Lowell Shops  
Whitin Machine Works  
Woonsocket Machine & Press Co., Inc.

**Couplings (Shaft)—**  
Charles Bond Company  
William Sellers & Co., Inc.

**Cranes—**  
Link-Belt Co.

**Dobby Chain—**  
Crompton & Knowles Loom Works  
Rice Dobby Chain Co.

**Doffing Boxes—**  
Diamond State Fibre Company  
Rogers Fibre Co.

**Doublers—**  
Saco-Lowell Shops  
Textile Finishing Machinery Co.  
Universal Winding Co.

**Doublers (Yarn)—**  
Foster Machine Co.

**Drives (Silent Chain)—**  
Charles Bond Company  
Link-Belt Co.  
Morse Chain Co.

**Drop Wires—**  
Crompton & Knowles Loom Works  
Draper Corporation  
R. I. Warp Stop Equipment Co.

**Dryers (Centrifugal)—**  
Roy, B. S. & Son Co.  
Tolhurst Machine Co.

**Dyeing, Drying, Bleaching and Finishing Machinery—**  
H. W. Butterworth & Sons Co.  
Cocker Machine & Foundry Co.  
Franklin Process Co.  
Perkins, B. F. & Sons, Inc.  
Rodney Hunt Machine Co.  
Textile Finishing Machinery Co.

**Dyestuffs and Chemicals—**  
Borne, Scrymser Co.  
Bosson & Lane  
E. I. du Pont de Nemours & Co., Inc.  
General Dyestuff Corporation  
National Aniline & Chemical Co.  
Newport Chemical Works  
Chas. H. Stone  
United Chemical Products Corp.  
Wolf, Jacques & Co.

**Dye Works—**  
Franklin Process Co.

**Electric Fans—**  
Allis-Chalmers Mfg. Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.

**Electric Hoists—**  
Allis-Chalmers Mfg. Co.  
Link-Belt Co.

**Electric Lighting—**  
Allis-Chalmers Mfg. Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.

**Electric Motors—**  
Allis-Chalmers Mfg. Co.  
Charles Bond Company  
General Electric Co.  
Westinghouse Electric & Mfg. Co.

**Electric Supplies—**  
Cooper-Hewitt Electric Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.

**Elevators—**  
Link-Belt Co.

**Engineers (Mill)—**  
—See Architects and Mill Engineers

**Engineers (Ventilating)—**  
Bahson Co.  
Carrier Engineering Corp.  
Parks-Cramer Co.  
See also Ventilating Apparatus.

**Engines (Steam, Oil, Gas, Pumping)—**  
Allis-Chalmers Mfg. Co.  
Sydnor Pump & Well Co.

**Expert Textile Mechanic—**  
J. D. Hollingsworth

**Extractors—**  
Tolhurst Machine Works  
Fences, Iron and Wire—  
Page Fence and Wire Products Assn.  
Wickwire Spencer Steel Co.  
Spaulding Fibre Co.

**Fibre Baskets—**  
Diamond State Fibre Company

**Fibre Boxes—**  
Diamond State Fibre Company  
Spaulding Fibre Co.

**Fibre Specialties—**  
Diamond State Fibre Co.  
Rogers Fibre Co.  
Spaulding Fibre Co.

**Finishing Compounds—**  
The Arabol Manufacturing Co.  
Arnold, Hoffman & Co., Inc.  
Borne, Scrymser Co.  
Hart Products Corp.  
Seydel Chemical Company  
Seydel-Woolley Co.  
L. Sonneborn Sons Co.  
United Chemical Products Corp.  
Jacques Wolf & Co.

**Finishing Machinery—**  
—See Dyeing, Drying, Bleaching and Finishing

**Fiat Wall Paint—**  
E. I. du Pont de Nemours & Co., Inc.

**Fluted Rolls—**  
Collins Bros. Machine Co.  
Fales & Jenks Machine Co.  
Saco-Lowell Shops  
Woonsocket Machine & Press Co., Inc.  
Whitin Machine Works

**Flyer Pressers and Overhaulers—**  
Saco-Lowell Shops  
Southern Spindle & Flyer Co.  
Whitin Machine Works  
Woonsocket Machine & Press Co., Inc.

**Flyers—**  
Saco-Lowell Shops  
Southern Spindle & Flyer Co.  
Whitin Machine Works

**Frames—**  
Steel Heddle Mfg. Co.

**Friction Clutches—**  
—See Clutches

**Garment Dyeing Machines—**  
Klauder-Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.

**Garnett Roll Grinders—**  
B. S. Roy & Son Co.

**Gearing (Silent Flexible)—**  
Link-Belt Co.

**Gears—**  
Charles Bond Company  
Ferguson Gear Co.

**Gears (Silent)—**  
Charles Bond Company  
Diamond State Fibre Company  
Ferguson Gear Co.

**Grate Bars—**  
Scriver Iron Works (McNaughton)  
Thomas Grate Bar Co.

**Grab Buckets—**  
Link-Belt Co.

**Greases—**  
The Arabol Manufacturing Co.  
Borne, Scrymser Co.  
N. Y. & N. J. Lubricant Co.  
L. Sonneborn Sons Co.  
United Chemical Products Corporation  
Jacques Wolf & Co.

**Gudgeon Rolls—**  
Easton & Burnham Machine Co.  
Roy, B. S. & Son Co.  
Washburn

**Hand Knotters—**  
Barber-Colman Co.

**Hand Stripping Cards—**  
Howard Bros. Mfg. Co.

**Hangers (Ball and Socket)—**  
Charles Bond Company  
William Sellers & Co., Inc.

**T. B. Wood's Sons Co.**

**Hangers (Shaft)—**  
Charles Bond Company  
William Sellers & Co., Inc.

**Hardware Supplies—**  
Textile Mill Supply Co.

**Harness Twine—**  
Garland Mfg. Co.

**Harness and Frames—**  
—See Heddles and Frames

**Heddles and Frames—**  
Garland Mfg. Co.  
Howard Bros. Mfg. Co.  
Steel Heddle Mfg. Co.  
L. S. Watson Mfg. Co.

**High Speed Warpers—**  
Barber-Colman Co.

**Hopper-Feed Hand Stokers—**  
The J. H. Williams Co.

**Hosiery Dyeing Machines—**  
Cocker Machine & Foundry Co.

## CLASSIFIED LIST OF ADVERTISERS

Klauder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.

**Humidity and Air Conditioning Apparatus**

- American Moistening Co.
- The Bahnson Co.
- Carrier Engineering Corp.
- Parks-Cramer Co.
- R. I. Humidifier & Ventilating Co.
- Humidity Controllers**

  - American Moistening Co.
  - The Bahnson Co.
  - Carrier Engineering Corp.
  - Parks-Cramer Co.
  - R. I. Humidifier & Ventilating Co.

- Hydro-Extractors**

  - Tolhurst Machine Co.

- Hydrogen Peroxide**

  - The Roessler & Hasslacher Chemical Co.

- Hydrosulphites**

  - Jacques Wolf & Co.

- Indigo Dyeing Machinery**

  - H. W. Butterworth & Sons Co.
  - Cocker Machine & Foundry Co.
  - Textile Finishing Machinery Co.

- Insulation**

  - Diamond State Fibre Company
  - Knit Goods Finishing Machines

    - Kaumagraph Co.
    - Merrow Machine Co., The

  - Knitting Lubricants

    - The Arabol Manufacturing Co.
    - Borne, Scrymser Co.

  - Laundry Machinery

    - Tolhurst Machine Works

  - Knotters

    - Barber-Colman Co.
    - Merrow Machine Co., The
    - Landscape Architect

      - E. S. Draper

    - Leather Packings

      - Charles Bond Company
      - Gratton & Knight Co.
      - Edward R. Ladew Co.

    - Leather Loom Pickers

      - Charles Bond Company
      - Gratton & Knight Co.
      - E. H. Jacobs Mfg. Co.

    - Leather Strapping

      - Charles Bond Company
      - Gratton & Knight Co.
      - Edward R. Ladew Co.

    - Leather Straps

      - Gratton & Knight Co.
      - E. H. Jacobs Mfg. Co.

    - Quid Chlorine

      - Arnold, Hoffman & Co., Inc.
      - Mathleson Alkali Works, Inc.

    - Looms

      - Crompton & Knowles Loom Works
      - Draper Corporation
      - Stafford Co., The
      - Loom Drop Wires

        - Crompton & Knowles Loom Works
        - R. I. Warp Stop Equipment Co.
        - Steel Heddle Mfg. Co.

      - Loom Harness

        - Atlanta Harness & Reed Mfg. Co.
        - Garland Mfg. Co.
        - Steel Heddle Mfg. Co.

      - Loom Pickers

        - Charles Bond Company
        - Garland Mfg. Co.
        - Gratton & Knight Co.
        - E. H. Jacobs Mfg. Co.
        - Edward R. Ladew Co.

      - Loom Reeds

        - Atlanta Harness & Reed Mfg. Co.
        - Steel Heddle Mfg. Co.

      - Loom Supplies

        - Charles Bond Company
        - E. H. Jacobs Mfg. Co.

      - Lubricants

        - Adam Cooks Sons, Inc.
        - Borne, Scrymser Co.
        - N. Y. & N. J. Lubricant Co.
        - L. Sonneborn Sons, Inc.
        - United Chemical Products Corporation.

      - Lug Straps

        - Charles Bond Company
        - Gratton & Knight Co.
        - E. H. Jacobs Mfg. Co.

      - Machinery Enamel

        - E. I. du Pont de Nemours & Co., Inc.

      - Mangies

        - H. W. Butterworth & Sons Co.
        - Textile Finishing Machinery Co.

      - Markers

        - Kaumagraph Co.

      - Measuring and Folding Machines

        - Curtis & Marble Machine Co.
        - Textile Finishing Machinery Co.

      - Mercerizing Machinery

        - H. W. Butterworth & Sons Co.
        - Cocker Machine & Foundry Co.
        - Textile Finishing Machinery Co.

      - Metal (Non-Corrosive)

        - Aluminum Company of America
        - American Nickel Corporation.

      - Metal Paint

        - E. I. du Pont de Nemours & Co., Inc.

      - Meters

        - Allis-Chalmers Mfg. Co.
        - General Electric Co.
        - Westinghouse Electric & Mfg. Co.

      - Mill Architects

        - See Architects.

      - Mill Lighting

        - See Electric Lighting.

      - Mill Starches

        - The Arabol Manufacturing Co.

      - Arnold, Hoffman & Co., Inc.
      - Corn Products Refining Co.
      - Keever Starch Co.
      - Penick & Ford, Ltd.
      - Stein, Hall & Co.
      - United Chemical Products Corporation.
      - Mill Supplies**

        - Charles Bond Company
        - Diamond State Fibre Company
        - Dixon Lubricating Saddle Co.
        - Garland Mfg. Co.
        - E. H. Jacobs Mfg. Co.
        - Textile Mill Supply Co.
        - Thomas Grate Bar Co.

      - Mill Trucks**

        - Diamond State Fibre Company
        - Spaulding Fibre Co.

      - Mill White**

        - E. I. du Pont de Nemours & Co., Inc.

      - Napper Clothing**

        - Howard Bros. Mfg. Co.
        - Wickwire Spencer Steel Co.

      - Monopole Oil**

        - United Chemical Products Corporation.
        - Jacques Wolf & Co.

      - Napper Roll Grinders**

        - Allis-Chalmers Mfg. Co.
        - General Electric Co.
        - B. S. Roy & Son Co.
        - Westinghouse Electric & Mfg. Co.

      - Oils**

        - The Arabol Manufacturing Co.
        - Arnold, Hoffman & Co., Inc.
        - Borne, Scrymser Co.
        - N. Y. & N. J. Lubricant Co.
        - L. Sonneborn Sons, Inc.
        - United Chemical Products Corporation.
        - Wolf, Jacques & Co.

      - Oils (Rayon)**

        - Borne, Scrymser Co.
        - Jacques Wolf & Co.

      - Opening Machinery**

        - H. B. American Machine Co.
        - Saco-Lowell Shops.
        - Whitin Machine Works.

      - Overhaulers**

        - Saco-Lowell Shops.
        - Southern Spindle & Flyer Co.

      - Overseaming and Overeding Machines**

        - Southern Spindle & Flyer Co.
        - Merrow Machine Co.

      - Paints**

        - Aluminum Co. of America.
        - The Gildon Co.
        - Tripod Paint Co.

      - Patents**

        - Paul B. Eaton.
        - Siggers & Siggers

      - Perforated Machinery Guards**

        - Wickwire Spencer Steel Co.

      - Perforated Metals**

        - Wickwire Spencer Steel Co.

      - Picker Gears**

        - Cocker Machinery & Foundry Co.

      - Pickers (Leather)**

        - Charles Bond Company.
        - Garland Mfg. Co.
        - Gratton & Knight Co.
        - E. H. Jacobs Mfg. Co.
        - Edward R. Ladew Co.

      - Pickers and Lappers**

        - Saco-Lowell Shops.
        - Whitin Machine Works.

      - Picker Sticks**

        - Charles Bond Company.
        - Garland Mfg. Co.

      - Piece Dyeing Machinery**

        - H. W. Butterworth & Sons Co.
        - Cocker Machine & Foundry Co.
        - Rodney Hunt Machine Co.
        - Textile Finishing Machinery Co.

      - Pipe and Fittings**

        - Parks-Cramer Co.

      - Portable Elevators**

        - Link-Belt Co.

      - Power Transmission Machinery**

        - Allis-Chalmers Mfg. Co.
        - Charles Bond Company.
        - Hyatt Roller Bearing Co.
        - Link-Belt Co.
        - Morse Chain Co.
        - William Sellers & Co., Inc.

      - Preparatory Machinery (Cotton)**

        - H. B. American Machine Co.
        - Saco-Lowell Shops.
        - Whitin Machine Works.

      - Presses**

        - Economy Baler Co.
        - Saco-Lowell Shops.

      - Pulleys (Cast Iron)**

        - Charles Bond Company
        - William Sellers & Co., Inc.

      - Pumps (Boiler Feed; also Centrifugal)**

        - Allis-Chalmers Mfg. Co.
        - Syndor Pump & Well Co.

      - Presses**

        - Collins Bros. Machine Co.

      - Quill Boards**

        - Washburn.

      - Quillers**

        - Crompton & Knowles Loom Works
        - Eastwood, Benj. Co.
        - Universal Winding Co.
        - Whitin Machine Works.

      - Quill Cleaners**

        - Terrell Machine Co.

      - Raw Stock Machines**

        - Kaluder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.

      - Rayon Oils**

        - United Chemical Products Corporation.

      - Receptacles**

        - Diamond State Fibre Co.
        - Economy Baler Co.
        - Rogers Fibre Co.
        - Spaulding Fibre Co.

      - Reels**

        - H. W. Butterworth & Sons Co.
        - Cocker Machine & Foundry Co.
        - Rodney Hunt Machine Co.

      - Rings**

        - Saco-Lowell Shops
        - Whitinsville Spinning Ring Co.

      - Ring Spinning Frames**

        - Fales & Jenks Machine Co.
        - H. & B. American Machine Co.
        - Saco-Lowell Shops.
        - Textile Finishing Machinery Co.
        - Whitin Machine Works.

      - Ring Travelers**

        - Dary Ring Traveler Co.
        - National Ring Traveler Co.
        - Victor Ring Traveler Co.
        - U. S. Ring Traveler Co.

      - Roller Leather**

        - A. C. Lawrence Leather Co.

      - Roll Machines**

        - Kaluder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.

      - Rolls**

        - American Bobbin Co.
        - H. W. Butterworth & Sons Co.
        - Collins Bros. Machine Co.
        - Fales & Jenks Machine Co.
        - Rodney Hunt Machine Co.
        - Saco-Lowell Shops.
        - Southern Spindle & Flyer Co.
        - Textile Finishing Machinery Co.
        - Whitin Machine Works.
        - Woonsocket Machine & Press Co., Inc.

      - Rolls (Metal)**

        - Rodney Hunt Machine Co.

      - Rolls (Rubber)**

        - Rodney Hunt Machine Co.

      - Rolls (Wood)**

        - Rodney Hunt Machine Co.
        - Washburn.

      - Roller Bearings**

        - Charles Bond Company.

      - Roving Cans**

        - Diamond State Fibre Company
        - Spaulding Fibre Co.

      - Roving Cans and Boxes**

        - Diamond State Fibre Company
        - Rogers Fibre Co.

      - Roving Machinery**

        - Saco-Lowell Shops.
        - Whitin Machine Works.
        - Woonsocket Machine & Press Co., Inc.

      - Saddles**

        - Dixon Lubricating Saddle Co.

      - Salt**

        - International Salt Co.

      - Sanitary Equipment**

        - Vogel, Joseph A. Co.

      - Sanitary Fountains**

        - See Drinking Fountains

      - Scales**

        - American Kron Scale Co.

      - Scallop Machines**

        - Merrow Machine Co., The

      - Scouring Powders**

        - The Arabol Manufacturing Co.
        - Bosson & Lane
        - Denison Mfg. Co.
        - Ford, J. B. Co.

      - Scrubbing and Cleaning Powders**

        - The Denison Mfg. Co.

      - Sesquicarbonate of Soda**

        - Mathleson Alkali Works, Inc.

      - Selling Agents**

        - Deering, Milliken & Co.
        - Reeves Bros.
        - Woodward, Baldwin & Co.

      - Selling Agents (Cotton Goods)**

        - Amory, Browne & Co.
        - Curran & Barry.
        - Deering, Milliken & Co.
        - Hunter Mfg. & Commission Co.
        - W. H. Langley & Co.
        - Leslie, Evans & Co.
        - Reeves Bros.
        - Wellington, Sears & Co.

      - Sewing Machines**

        - Merrow Machine Co.

      - Sewing Machines and Supplies**

        - Curtis & Marble Machine Co.

      - Shafting, Hangers, Etc.**

        - See Power Transmission Machinery.

      - Shafting**

        - William Sellers & Co., Inc.

      - Shear Grinders**

        - R. S. Roy & Son Co.

      - Shell Rolls**

        - Saco-Lowell Shops.
        - Washburn.

      - Shell Stitch Machines**

        - Merrow Machine Co.

      - Shuttles**

        - David Brown Co.
        - Lowell Shuttle Co.
        - Draper Corporation.
        - Shamrow Shuttle Co.
        - U. S. Bobbin & Shuttle Co.
        - L. S. Watson Mfg. Co.
        - J. H. Williams, Co., The

      - Silk Yarns (Artificial)**

        - American Cellulose & Chemical Mfg. Co.
        - Asian, Inc.
        - Commercial Fibre Co.
        - Duplan Silk Corp.
        - E. I. DuPont de Nemours & Co.
        - Tubize Artificial Silk Co.

      - Silent Chain Drive**

        - Link-Belt Co.
        - Morse Chain Co.

      - Singeing Machinery**

        - H. W. Butterworth & Sons Co.
        - Textile Finishing Machinery Co.

      - Sizing Machines**

        - Charles B. Johnson.
        - Saco-Lowell Shops

      - Sizing Starches, Gums**

        - Arnold, Hoffman & Co., Inc.
        - Arabol Mfg. Co.
        - Hart Products Corp.
        - L. Sonneborn Sons, Inc.
        - Stein, Hall & Co.
        - United Chemical Products Corporation.
        - Jacques Wolf & Co.

      - Sizing Compounds**

        - The Arabol Manufacturing Co.
        - Arnold, Hoffman & Co., Inc.
        - Bosson & Lane
        - Corn Products Refining Co.
        - Drake Corp.
        - Hart Products Corp.
        - A. Klipstein & Co.
        - John P. Marston & Co.
        - Seydel Chemical Co.
        - Seydel-Woolley Co.
        - United Chemical Products Corporation.
        - Wolf, Jacques & Co.

      - Skein Machines**

        - Kaluder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.

      - Skewers**

        - David Brown Co.
        - Courtney, Dana S. Co.
        - T. C. Entwistle Co.
        - Walter L. Parker Co.
        - U. S. Bobbin & Shuttle Co.

      - Slashers**

        - Charles B. Johnson.
        - Saco-Lowell Shops.

      - Slasher Combs**

        - Easton & Burnham Machine Co.
        - T. C. Entwistle Co.
        - Steel Heddle Mfg. Co.
        - Textile Finishing Machinery Co.

      - Slashers and Equipment**

        - Saco-Lowell Shops

      - Soaps**

        - Arabol Mfg. Co.
        - Arnold, Hoffman & Co., Inc.
        - L. Sonneborn Sons, Inc.
        - United Chemical Products Corp.

      - Soda Ash**

        - J. B. Ford Co.
        - Mathleson Alkali Works, Inc.
        - Arabol Mfg. Co.
        - Borne, Scrymser Co.
        - Seydel-Woolley Co.
        - L. Sonneborn Sons Co.
        - U. S. Bobbin & Shuttle Co.
        - United Chemical Products Corp.
        - Wolf, Jacques & Co.

      - Sodium Perborate**

        - The Roessler & Hasslacher Chemical Co.

      - Sodium Peroxide**

        - The Roessler & Hasslacher Chemical Co.

      - Solozone**

        - The Roessler & Hasslacher Chemical Co.

      - Spindles**

        - Collins Bros. Machine Co.
        - Draper Corporation.
        - Fales & Jenks Machine Co.
        - Saco-Lowell Shops.
        - Southern Spindle & Flyer Co.
        - Woolen Machine Works.
        - Woonsocket Machine & Press Co., Inc.

      - Spindle Repairs**

        - Collins Bros. Machine Co.
        - Fales & Jenks Machine Co.
        - Saco-Lowell Shops.
        - Southern Spindle & Flyer Co.
        - Spinning Frame Saddles

          - Dixon Lubricating Saddle Co.

        - Spinning Frame Top Rolls

          - Saco-Lowell Shops.

        - Spinning Frame Top Rolls (Wood)

          - Washburn.

        - Spinning Rings**

          - Collins Bros. Machine Co.
          - Draper Corporation.
          - Fales & Jenks Machine Co.
          - Saco-Lowell Shops.
          - Whitin Machine Works.

## CLASSIFIED LIST OF ADVERTISERS

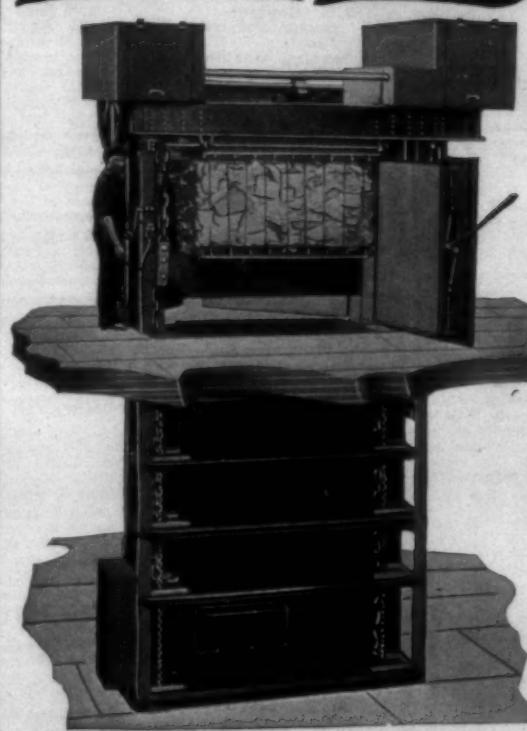
**Whitinsville Spinning Ring Co.**  
**Spinning Tapes—** American Textile Banding Co.  
 Georgia Webbing & Tape Co.  
**Spools—** David Brown Co.  
 Courtney, Dana S. Co.  
 Lestershire Spool & Mfg. Co.  
 Walter L. Parker Co.  
 Steel Heddle Mfg. Co.  
 U. S. Bobbin & Shuttle Co.  
**Spoolers—** Draper Corporation.  
 Easton & Burnham Machine Co.  
 Eastwood, Benj. Co.  
 Saco-Lowell Shops.  
 Whitin Machine Works.  
**Spooler Tensions (Filling Wind)—** Foster Machine Co.  
**Sprockets—** Cocker Machine & Foundry Co.  
**Sprockets, Silent Chain—** Link-Belt Co.  
 Morse Chain Co.  
**Squeeze Rolls—** H. W. Butterworth & Sons Co.  
 Rodney Hunt Machine Co.  
 Textile Finishing Machinery Co.  
**Starch—** The Arabol Manufacturing Co.  
 Arnold, Hoffmann & Co., Inc.  
 Corn Products Refining Co.  
 Keever Starch Co.  
 Penick & Ford, Ltd.  
 Stein, Hall & Co.  
 United Chemical Products Corporation.  
**Stencil Machines—** A. J. Bradley Mfg. Co.  
**Stencil Papers—** A. J. Bradley Mfg. Co.  
**Stripper Cards—** Wickwire Spencer Steel Co.  
**Sulphur Dyeing Machines—** Klauder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.  
**Tanks—** H. W. Butterworth & Sons Co.  
 Rodney Hunt Machine Co.  
 Textile Finishing Machinery Co.  
**Tape—** Georgia Webbing & Tape Co.  
**Temperature, Regulators, Pressure—** Powers Regulator Co.  
 Taylor Instrument Co.  
**Temples—** Draper Corporation.  
**Textile Apparatus (Fabric)—** B. F. Perkins & Son, Inc.  
 Henry L. Scott & Co.  
**Textile Castings—** H. W. Butterworth & Sons Co.  
 Cocker Machinery & Foundry Co.  
 Textile Finishing Machinery Co.  
**Textile Dryers—** American Moistening Co.  
**Textile Gums—** The Arabol Manufacturing Co.  
 United Chemical Products Corporation.  
 Jacques Wolf & Co.  
**Textile Machinery Specialties—** H. W. Butterworth & Sons Co.  
 Cocker Machinery & Foundry Co.  
 Rodney Hunt Machine Co.  
 Textile Finishing Machinery Co.  
**Textile Soda—** J. B. Ford Co.  
 Mathleson Alkali Works  
**Thermometers—** Powers Regulator Co.  
 Taylor Instrument Co.  
**Top Rolls For Spinning Frames—** Saco-Lowell Shops  
 Washburn.  
**Trademarking Machines—** Curtis & Marble Machine Co.  
**Transfer Stamps—** Kaumagraph Co.  
**Transmission Belts—** Charles Bond Company.

Graton & Knight Co.  
 Edward R. Ladew Co.  
**Transmission Machinery—** Allis-Chalmers Mfg. Co.  
 William Sellers & Co., Inc.  
**Toilets—** Vogel, Jos. A. Co.  
**Transmission Silent Chain—** Link-Belt Co.  
 Morse Chain Co.  
**Traveler Cups—** Whitinsville Spinning Ring Company  
**Trucks (Milk)—** Diamond State Fibre Company  
 W. T. Lane & Bros.  
 Rogers Fibre Co.  
**Trucks For Pin Boards—** Washburn.  
**Tubes (Paper)—** Sonoco Products Co.  
**Turbines (Steam)—** Allis-Chalmers Mfg. Co.  
**Twister Rings—** Saco-Lowell Shops  
 Whitinsville Spinning Ring Co.  
**Twisting Machinery—** Collins Bros. Machine Co.  
 Draper Corporation.  
 Saco-Lowell Shops.  
 Whitin Machine Works.  
**Underwear Machines—** Merrow Machine Co.  
**Varnishes—** The Glidden Co.  
**Ventilating Apparatus—** American Moistening Co.  
 Parsons-Cramer Co.  
**Warp Drawing Machines—** Barber-Colman Co.  
**Ventilating Fans—** B. F. Perkins & Son, Inc.  
**Warpers—** Barber-Colman Co.  
 Crompton & Knowles, Loom Works.  
 Draper Corporation.  
 Easton & Burnham Machine Co.  
 T. C. Entwistle Co.  
 Saco-Lowell Shops.  
**Warp Dressing—** The Arabol Manufacturing Co.  
 Arnold, Hoffmann & Co., Inc.  
 Bossom & Lane.  
 Drake Corporation.  
 Hart Products Corp.  
 Seydel Chemical Company.  
 Seydel-Woolley Co.  
 L. Sonnenborn Sons Co.  
 United Chemical Products Corporation.  
**Warp Sizing—** The Arabol Manufacturing Co.  
 Borne, Scrymser Co.  
 United Chemical Products Corporation.  
 Jacques Wolf & Co.  
**Warp Stop Motion—** Draper Corporation.  
 R. I. Warp Stop Equipment Co.  
**Warp Tying Machinery—** Barber-Colman Co.  
**Warper Shell—** Cocker Machine & Foundry Co.  
**Warpers (Silk or Rayon)—** Eastwood, Benj. Co.  
 Sipp Machine Co.  
**Washers (Fibre)—** Diamond State Fibre Company  
 Rogers Fibre Co.  
**Waste Reclaiming Machinery—** Saco-Lowell Shops.  
 Whitin Machine Works.  
 Woonsocket Machine & Press Co. Inc.  
**Waste Presses—** Economy Baler Co.  
**Water Controlling Apparatus—** Rodney Hunt Machine Co.  
**Water Wheels—** Allis-Chalmers Mfg. Co.  
**Weighting Compounds—** Arabol Mfg. Co.  
 Bossom & Lane.  
 General Dyestuff Corp.

Hart Products Corp.  
 Marston, Jno. P. Co.  
 Seydel Chemical Co.  
 Seydel-Woolley Co.  
 L. Sonnenborn Sons, Inc.  
 United Chemical Products Corporation.  
 Wolf, Jacques & Co.  
**Well Drillers—** Sydnor Pump & Well Co.  
**Whizzers—** Tolhurst Machine Works.  
**Winders—** Easton & Burnham Machine Co.  
 Eastwood, Benj. Co.  
 Foster Machine Co.  
 Universal Winding Co.  
**Winders (Skein)—** Foster Machine Co.  
 Sipp Machine Co.  
**Windows—** Carrier Engineering Corp.  
 Parks-Cramer Co.

**Window Guards—** Wickwire Spencer Steel Co.  
**Wrenches—** Wickwire Spencer Steel Co.  
**Yardage Clocks—** T. C. Entwistle Co.  
 Saco-Lowell Shops.  
**Yarns—** Mauney-Steel Co.  
**Yarn Tension Device—** Eclipse Textile Devices, Inc.  
 Saco-Lowell Shops.  
**Yarn Presses—** Economy Baler Co.  
**Yarns (Cotton)—** Acme Sales Co.  
 Dixie Mercerizing Co.  
**Yarns (Mercerized)—** Acme Sales Co.  
 Dixie Mercerizing Co.  
**Yarn Testing Machines—** Scott, Henry L. & Co.

**ALL STEEL**  
**ECONOMY**  
 FIRE PROOF



**Waste Press**

**Up-Stroke Hydraulic Performance, Electric Operated**

**Saves**

**First Cost**  
**Pits**  
**Floor Space**  
**Labor**  
**Operating Costs**

**Presses for Waste, Cloth, Yarn, etc.**

**Largest Line in U. S.**

**ECONOMY BALER CO.,** ANN ARBOR,  
 DEPT. T. B., MICH.

## Ashworth Brothers, Inc.

### Tempered and Side Ground Card Clothing

TOPS RECLOTHED

LICKERINS REWOUND

COTTON MILL MACHINERY REPAIRED

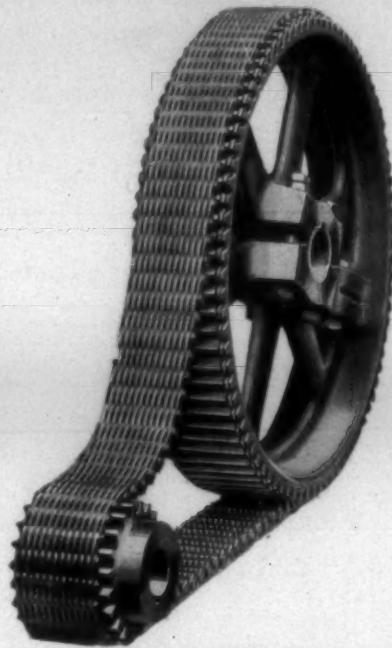
For Prompt Service send your Top Flats to be reclothed and your Lickerins to be rewound to our nearest factory. We use our own special point hardened lickerin wire

Graham and Palmer Sts., Charlotte, N. C.

44-A Norwood Place, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

Gibson Supply Co., Texas Representative, Dallas, Texas.



Link Belt Silent

Chain Drives  
in StockSizes  $\frac{1}{2}$  to 15 H. P.  
Any Speed Ratio from  
1 to 1 up to 7 to 1**Graton & Knight**

Leather Belting

**Dodge**

Hangers, Pulleys and Couplings

**S-K-F**

Ball Bearing Transmission

**Dana S. Courtney Co.**

Bobbins, Spools, Etc.

**Wyandotte**

Detergent, Textile Soda, Etc.

**Card Clothing****Reeds****Everything in Mill and Factory Supplies**

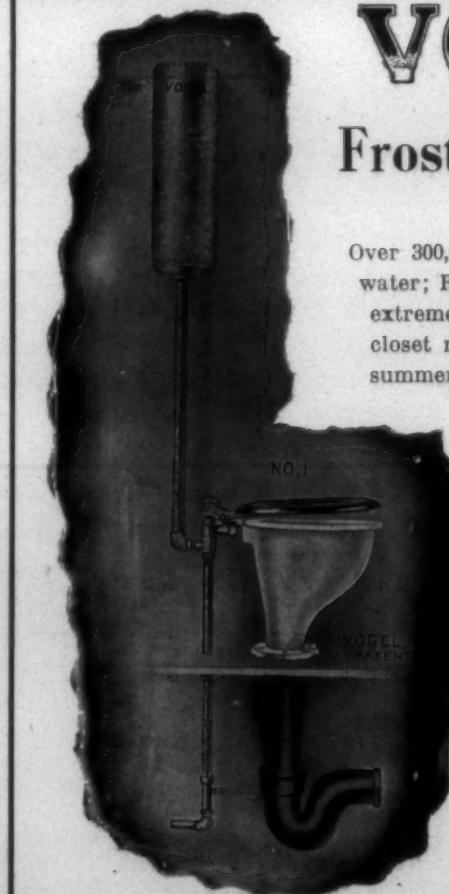
Phones 2781-2782

Specify  
"UCP" on your  
RequisitionsThese Products are the Reliable  
Standards of Uniformity De-  
manded by the Leading Textile  
Mills.**Dyestuffs Softeners**

Sizes      Oils      Chemicals

**UNITED CHEMICAL PRODUCTS  
CORPORATION***Importers, Exporters and Manufacturers*York and Colgate Sts.      Jersey City, N. J.  
Pawtucket, R. I.      Chicago, Ill.      Norwalk, Conn.  
Southern Offices

Charlotte, N. C.      Chattanooga, Tenn.

**VOGEL**  
PATENTED**Frost Proof Closets**Over 300,000 giving satisfaction. Save  
water; Require no pit; Simple in the  
extreme. The most durable water  
closet made. In service winter and  
summer.Enamelled roll flushing rim  
bowls.

Heavy brass valves.

Strong hardwood seat.

Heavy riveted tank.

Malleable seat castings will  
not break.**SOLD BY JOBBERS  
EVERWHERE**

Joseph A. Vogel Co.      Wilmington, Del.



# Replacements

- ¶ Other things being equal, the mill best fitted to meet the keen competition of to-day and to-morrow is the one with modern equipment.
- ¶ There is no one factor in a mill's equipment more important than its looms, and there is no loom which year in and year out is a more consistent performer than the Stafford Automatic.
- ¶ Not only do Stafford looms operate with a minimum of fixing and upkeep cost, but they invariably produce a high quality of fabric having selling value in keeping therewith.

A Stafford representative will gladly call at any time and discuss with you problems of mutual interest.

## THE STAFFORD COMPANY

*Weaving Machinery* · READVILLE, MASS.



*Southern Agent*  
Paterson Office  
Canadian Representatives

FRED H. WHITE, Charlotte, N. C.  
179 Ellison Street, Paterson, N. J.  
ROSS WHITEHEAD & CO., LTD., Montreal, Canada

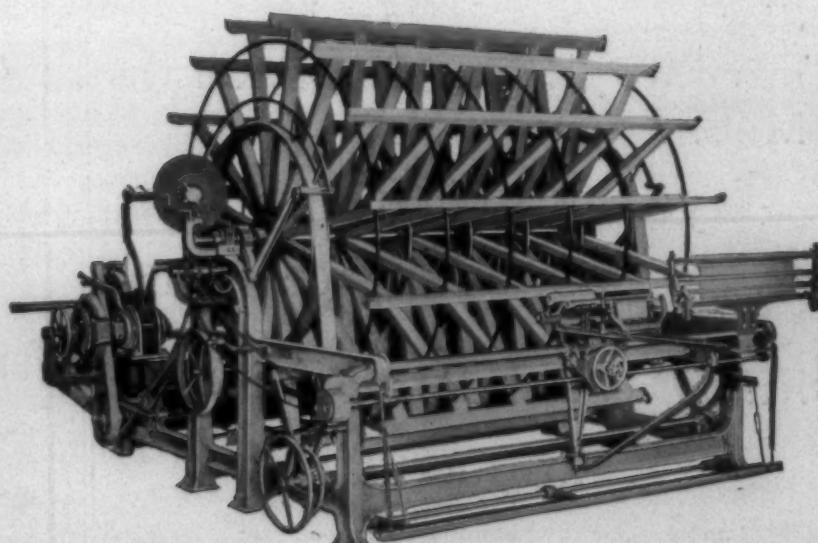
14

*EASTWOOD PRODUCTS for SILK, RAYON, fine Counts of COTTON*

**Beaming-off  
in almost half  
the time is only  
one of the fea-  
tures found when  
you operate an  
Eastwood Warper**

**Benjamin Eastwood Company**  
Paterson, New Jersey

Represented in the South by CAROLINA SPECIALTY CO., Charlotte, N. C.



*The Eastwood Warper as we build it with  
Direct motor drive on Beaming Head*